COMPUTER GAMES STRATEGY PLUS

IBM PC, Mac, Amiga & CD ROM

Issue 23 October 1992
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F-15 STRIKE EAGLE III
Sneak Preview

PATRIOT
In depth look

PLUS:

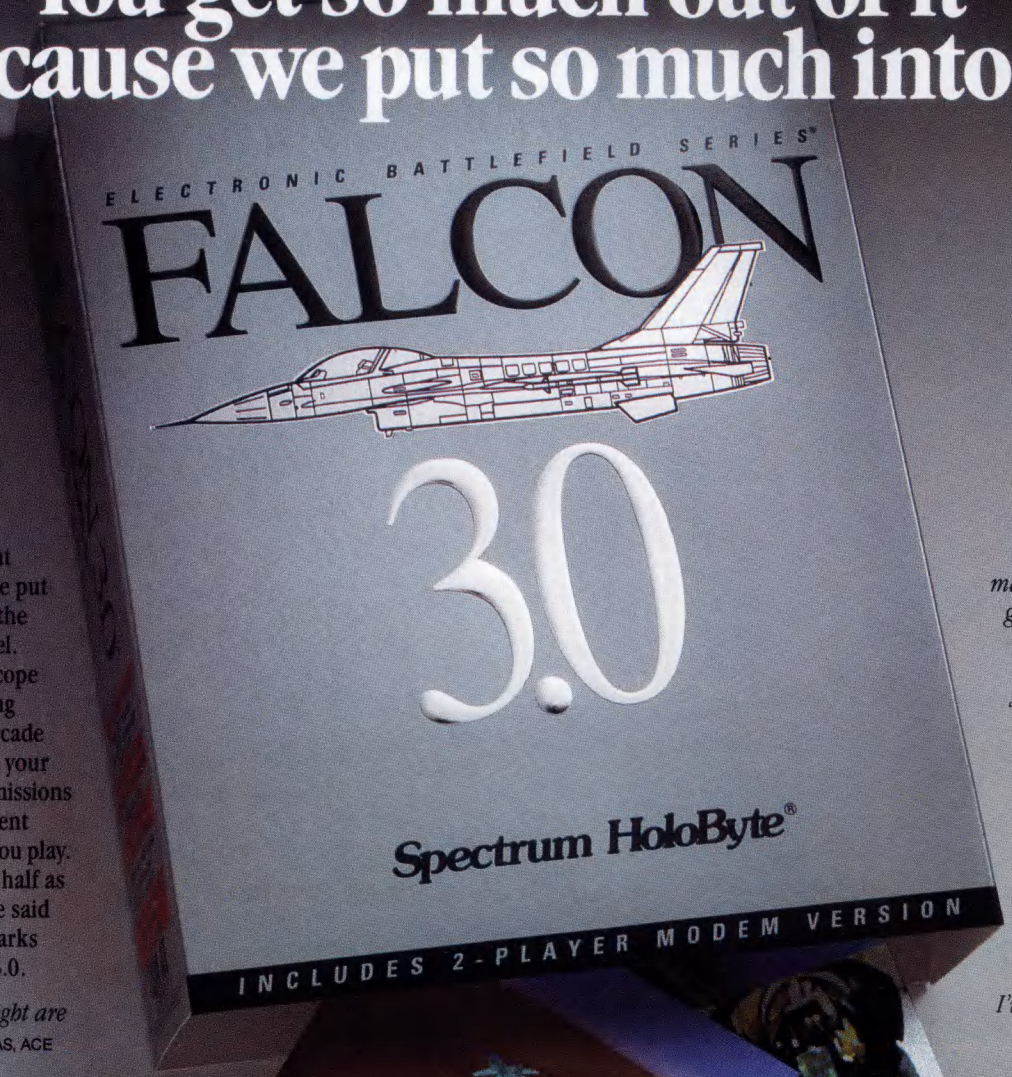
New World Order, Ragnarok,
Victory at Sea, High Command,
X-Conq, Siege & 100 Year War

9 770955 442033 10

TIPS:

Dark Queen of Krynn,
& Aces of the Pacific
Wizardry VII, Laura Bow II

You get so much out of it because we put so much into it.



We could tell you about the superb graphics we put into Falcon 3.0™. And the incredibly real F-16 feel. And the sensational scope that delivers everything from Instant Action arcade excitement to plotting your own Red Flag training missions to engaging in a different campaign every time you play. But we couldn't say it half as well as the critics have said it. Look at the high marks they've given Falcon 3.0.

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PETER OLAFSON, COMPUTE

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EVAN BROOKS, COMPUTER GAMING WORLD

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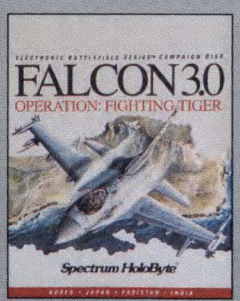
"Be excited. Falcon 3.0 makes other efforts in this genre seem like test runs for the real thing."
STRATEGY PLUS EDITORS

"The most complete and accurate jet fighter simulation to be found this side of a security clearance. Period."
RICHARD SHEFFIELD, COMPUTE

"The most appealing aspect is the realism. This is as true to life as I've seen on a computer."
COMPUTER GAME REVIEW EDITORS



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Reader Service No. 6

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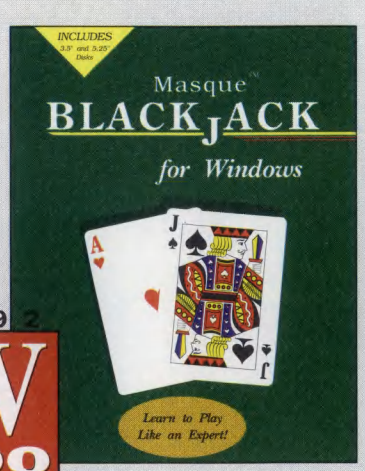
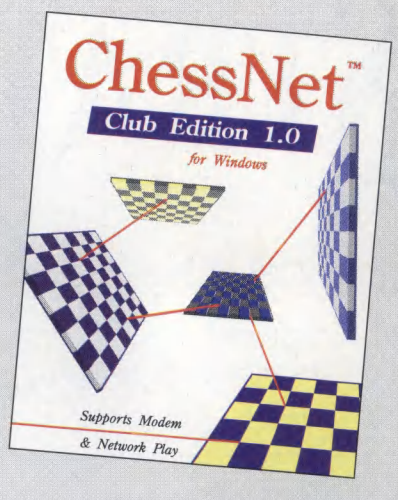


1992 WINDOWS 100 MAGAZINE ANNUAL WIN AWARD



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Windows Magazine

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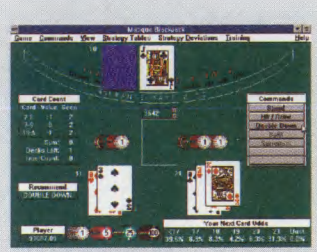
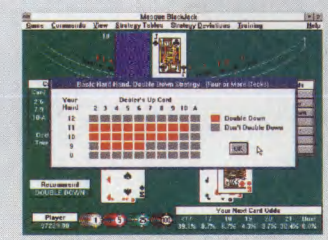


Split hand with hand values, card count, odds calculations and strategy recommendation windows displayed.



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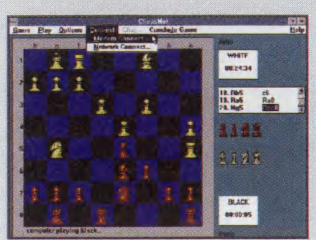

Play against the computer or against friends via modem or network.

The options menu shows some of the many game features.

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Number 23
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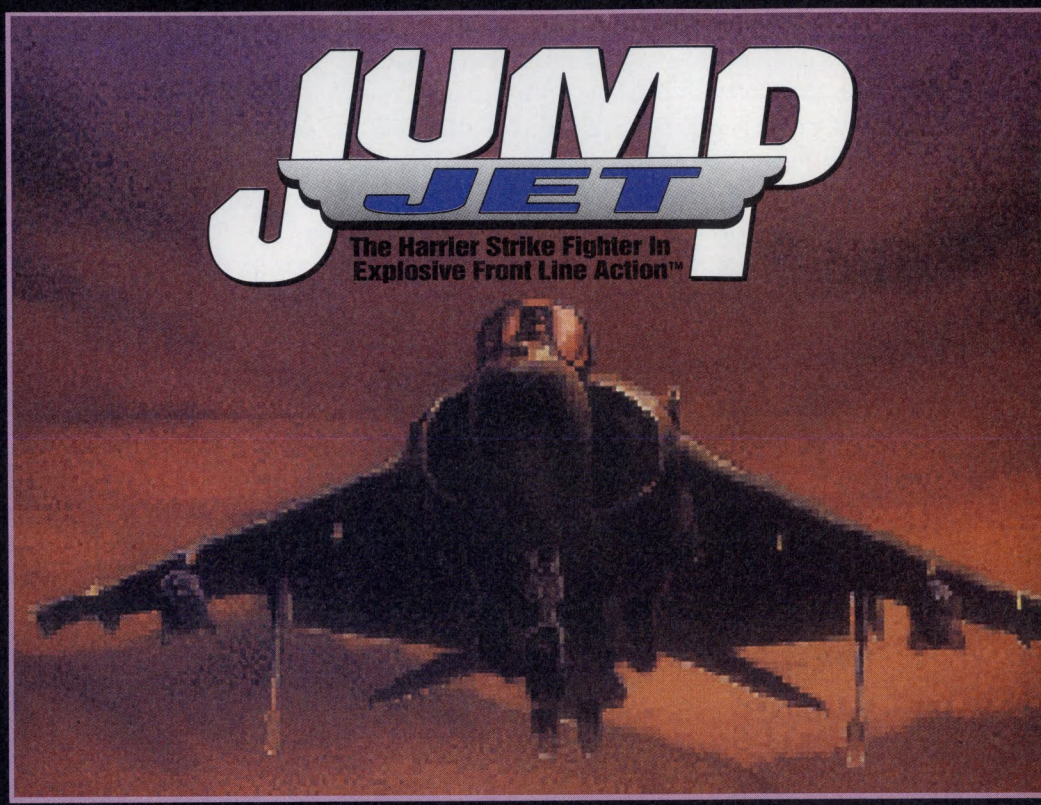

Actual screen shown.

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Soft on war

Remember the days when the talk was that 'wargames are dead'? At around that time Electronic Arts were refusing to distribute SSI's wargames any longer, while also untying the knot with SSG. And yet today wargames are flourishing more than ever, as our feature in this issue surely proves. Of course publishing wargames and selling them are two different things, but there's no denying that grounds exist for optimism.

Traditionally wargames have been last in line when it came to collecting a new suit of clothes; adventure games and even sports games were always the first to get the sound and graphics glamour treatment. This neglect is partially understandable as the essence of a wargame is the strategic challenge. In adventure games the narrative is advanced graphically, so the look of the games becomes primary. But now wargames are having their day: **V For Victory**, **New World Order**, and soon, **Patriot**, will be available in Super VGA. Joining them on top of the techno tree is **Coalition Command** for CD ROM, a Desert Storm wargame written by veteran games designer Dave Arneson.

Coalition Command, though, takes a different tac to most of the games on the subject. It is a joint project between Compton's New Media, who have already published a number of CD ROM titles, and Quantra Press Inc. As Chris Crawford predicted, it is one of what is likely to be the first of many titles on this new media to describe itself as 'edutainment'. This is a useful term only in that it helps eliminate the guilt factor that some users experience when playing a 'mere game'. In keeping with this somewhat lofty aim, the program will not just be pitched at gamers but also at Compton's more 'natural' market, that is, consumers with a seemingly unquenchable thirst for encyclopedic knowledge relayed to them via a shiny silver disc.

Chris Crawford's concept of a 'wargame for the rest of us' (**Patton Strikes Back**) used multimedia, amongst other things, in an attempt to woo 'everyday people' as well as wargamers, but only ended up proving unsatisfactory to both markets (do only wargamers play wargames?). **Coalition Command** with its huge CD ROM database will also be hoping to attract a cross-over audience and it will be interesting to see if it fares any differently at the tell-tale tills than **Patton Strikes Back**.

At the other end of the scale, Columbia Games have confirmed that they will ship **Eastern Front** (a conversion of their boardgame which used a 'block' system) without a computer opponent, in effect making it the first 'modem only' game. Microprose too, are getting in on the act with a Napoleonics game now being put together by their UK office, while Sid Meier and Bruce Shelley, although pretending to work on **Pirates Gold**, are in fact working on an American Civil War simulation. Somewhat closer to completion is SSG's **Carriers at War** and Alan Zimm's game for RAW, **Fleet Commander**.

Personally, I found the design articles in the wargames feature this issue fascinating. Naturally enough, everyone thinks they have the right answer as to what is the perfect design, and after slaving away for years (in some cases) who can blame them? It will be interesting to see how the games fare when they emerge from the comfort of the womb into the harsh light of the marketplace. And also when they come under the steely but fair gaze of our reviewers (as they most surely will). My hope is that *all* these labors of love will be a success. Let's face it, nobody said at the outset: 'Hey! I've got a great idea that'll make a ton of money. I'll design a wargame!'

Eight days a week

Strategy Plus is pleased to welcome aboard its first full time editorial staff member, apart from yours truly. Like his musical namesake Eleanor, Paul Rigby hails from Liverpool and it is from this picturesque city that *Strategy Plus* UK will now function. All European correspondence and lifetime ad contracts should be sent c/o this office (see address opposite). ❑

STRATEGY PLUS INC

US Office
Post Office Box 21
Hancock, Vermont 05748

UK Office
Harley Buildings,
11 Old Hall St,
Liverpool L3 9HT UK

Editor
Brian Walker
Compuserve: 76711,347

Operations manager
Michael Cassara
Tel 802 767 4622

Advertising managers
US
Gregg Sauter
Tel 802 767 4622

UK
Paul Rigby
Tel 051 260 1225

Produced by
Peter Post
Sara Blum
James MacKay

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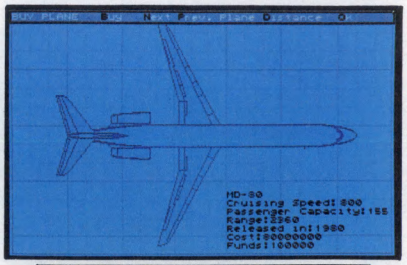
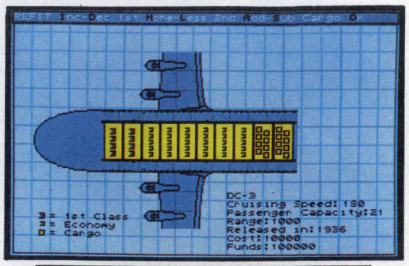


- Buy the latest planes as new technology becomes available.



- You decide how to fit out all your planes.

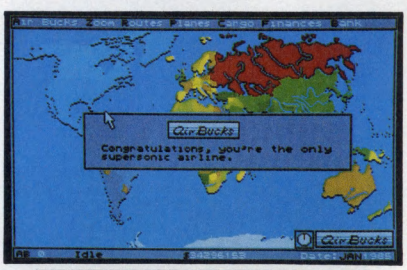
Air Bucks is your chance to build an airline- it won't be easy, but if you make it the rewards are huge! Start with $100,000 and a DC3 in 1946, at the start of the air travel boom. Decide which places to fly to, where to use as a hub, when to buy new planes and which ones to buy. New planes become available over time, from a DC9 to Boeing's 747! But beware just because a plane is new does not mean it is right for you. You must also find the cash to pay for it; and planes don't come cheap! You are sure to need the help of your friendly bank sooner or later, or even to sell shares!

AIR BUCKS

- *1 to 4 players (human or computer)*
- *Sophisticated economic model.*
- *World map can change every game.*
- *Fleet size larger than you're likely to ever need!*
- *Detailed Graph Chart and reprints*
- *Hi-Resolution Graphics supported (IBM PC).*
- *Easy to use point 'n' click interface.*

- You can even set the luxury level on your fleet.

- There's money to be made in cargo as well as passenger flights.



- Will you beat your rivals to this and other targets.

YOUR RUNWAY TO SUCCESS!

Impressions

Committed to Excellence in Strategy Entertainment

Movers and shakers

WESTWOOD Associates, one of SSI's prime outside development teams, **Eye of the Beholder** etc, have signed up with Virgin Games. Their first release on this label will be the fantasy adventure, **Kyrandia,** followed closely by **Dune 2: The Building of a Dynasty**. Possibly to fill in this vacuum, SSI have signed Event Horizon. The new partnership's first release will be **The Summoning,** which was previewed in issue 20 and is now set for an October release.

So as to not feel left out, Sierra On-Line have gobbled up Bright Star Technology, a Washington-based company best known for their education products and therefore of no interest to readers of this magazine.

But all is not lost. Bright Star developed hyper-animation technologies for combining patterns of human speech and facial images into a talking face, a system which Sierra say they will incorporate into 'future interactive entertainment' (ie games).

As if that isn't enough, Bright Star also know lots and lots about Macs. So look out for **Kings Quest VI** on the Apple II.

Trump extremely limited

TRUMP Tower! Ivana Trump! Trump Castle! How much more excitement (and Trumps) can you stand? Better get your breath back now for now for there's more on the way and it's *limited*. **Trump Castle II Deluxe** is being produced in a limited edition of two million. Better join the lines right now as this new edition includes Baccarat, Roulette, Craps, Video Poker, and slots. The poker games include 5-Card Draw, 5-Card Stud, 7-Card Stud or Texas Hold 'Em, with up to four players or four fictional opponents.

In addition to the games, there's digitized pics and a free Trump Castle Gaming Guide. **Trump Castle II Deluxe** will be released by Capstone, the company that brought you Bill and Ted's Excreable Adventure.

Software Toolworks Secrets Loom

THE first results of the agreement struck between Software Toolworks and LucasArts, whereby the former would port the latter's games to CD ROM, can now be seen. **Secret Weapons of the Luftwaffe** on the silver shiny now includes four Tour of Duty disks -- the P80 Lightning, the P-38 shooting star, the HE162 Salamander and the DO335 Arrow.

The most radical effects of the port, however, can be seen in the two adventure games, **Loom** and **The Secret of Monkey Island**. The CD ROM version of **Loom** now contains a 30 minute introduction to the main game and features a full voice dialogue and orchestral soundtrack. The graphics have been upgraded to 256 color from the 16 colors that was the DOS version. **The Secret of Monkey Island** now features a CD stereo soundtrack and fully digitized sound effects.

Seven Cities of Gold rediscovered

DAN Bunten's classic game, **Seven Cities of Gold,** is going to be republished by Electronic Arts, though Dan is acting only as a 'consultant' on the project. EA told us that the major changes will be of a 'graphical nature', 256 color VGA to be precise.

There will also be soundboard support, while the random world generator has been 'strengthened,' according to EA's Jim Rushing who is coordinating the project. "The worlds now will be more believable, more realistic", he told us, "and there will be more of them." **Seven Cities of Gold** is scheduled for a January '93 release. Look for a preview shortly.

Meanwhile, back in Arkansas, Mr Bunten says he switched his allegiances from Microprose to EA, despite the success of **Global Conquest** for Microprose.

Dan is currently working on a port of **M.U.L.E** to a machine known as the Sega Genesis, a platform he is eager to support because of its multi player potential.

Down the upgrade path

The following bug fixes, patches, and lord knows what else, are available from the following companies:

Origin (512 328 5490)
UK (0444 831761)
Underworld
bug fix.

SSI (408 737 6800)
UK (021 625 3388)
Prophecy of the Shadow
Soundblaster fix
Dark Queen of Krynn
update patch
Carrier Strike
v 1.1 bug fix.

Accolade
UK (081 877 0880)
US (408 985 1700)
Jack Nicklaus Signature Edition
update to fix divide error.

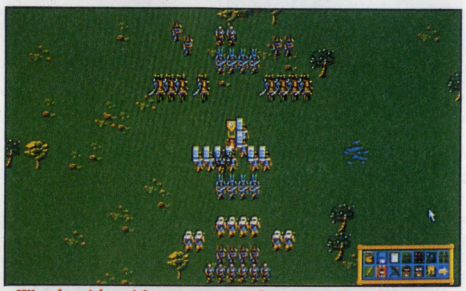
Microprose
(301 771 6700)
UK (0666 504326)
F117A Nighthawk
v 0.4 upgrade
Sword of the Samurai
key disk patch
Global Conquest
v 2.0 update.

Three Sixty Pacific
(408 879 9144)
UK (0743 549442)
Harpoon
North Atlantic Battleset update.

Merit (214 385 2353)
UK (0260 299909)
Dark Seed
v 1.2a update.

DON'T GET MAD...

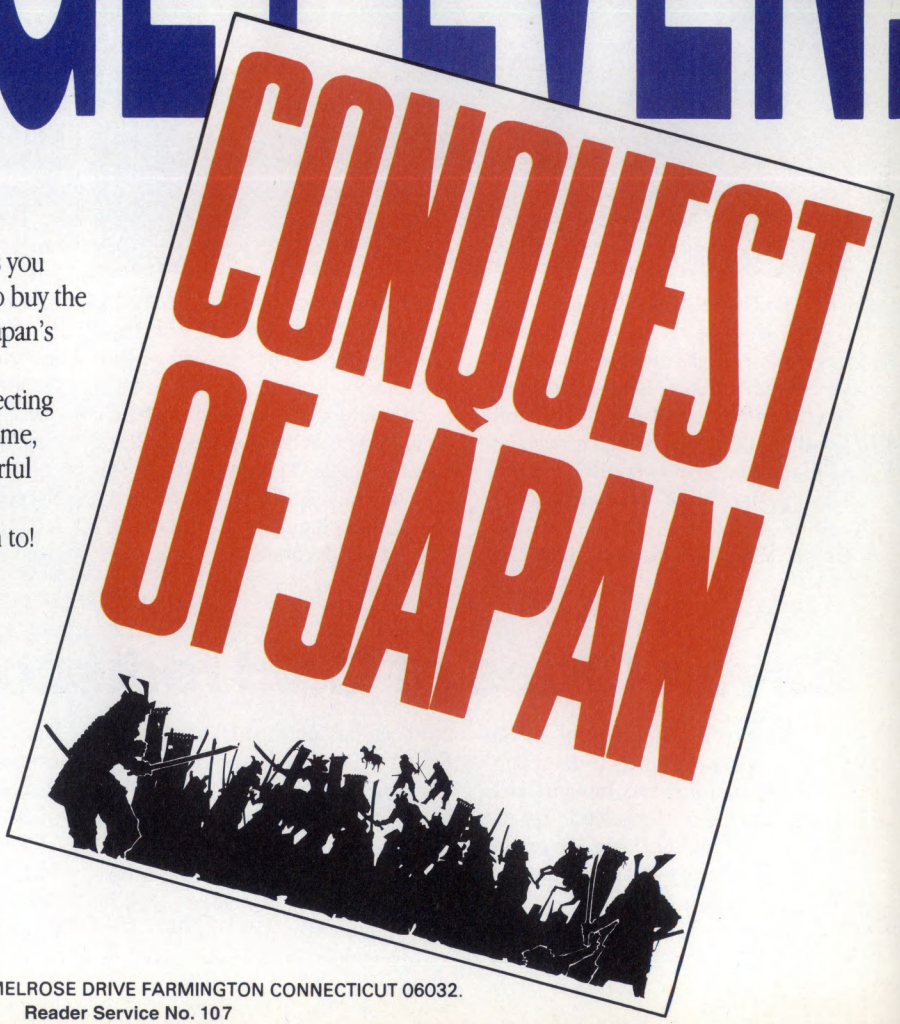
...GET EVEN!



Watch with pride as your warriors move into intricate formations (HIGH RESOLUTION mode IBM PC only).

The game is full of sumptuous graphics.

CONQUEST OF JAPAN



Your Chance to get your own back! Conquest of Japan gives you five cities, each with money to hire armies -it is up to you to buy the right soldiers, and direct your armies to conquer Honshu, Japan's main island! In a truly epic production, you are both the general,planning campaigns, and the army commander, directing troops within each battle. All battles are played out in real time, with your soldiers moving into formation in fantastic, colourful animation! You can become as involved as you like -from watching progress, to instructing individual men if you wish to! You can even choose to play each battle in Hi Res (386/25 machines or better reccommended) or faster Low Res.

FEATURES:

- *Miniature-style war simulation*
- *Cities located differently each game*
- *Choice of authentic troop formations*
- *Simple to play*
- *Your chance to conquer Japan!!*

Impressions IMPRESSIONS SOFTWARE INC. 7 MELROSE DRIVE FARMINGTON CONNECTICUT 06032.

Reader Service No. 107

Sex, wax, and sellotape

FROM the development team that produced Accolade's **Elvira** games comes another role playing adventure that promises plenty of action, buckets full of blood and a sink-full of gore all stuck together by the UK-based Horrorsoft.

Mike Woodruff, promises, not surprisingly, that **Waxworks** will be bigger and better than their previous two role-playing games starring Ms Heaving Bosom. "The plots are so devious and sinister that it will have even the best players scratching their head mystified," said Mike scratching his head.

"This is our third program for Accolade," said Mike, 'and the sequence of events usually has us submitting storyboards to America and getting the go ahead with each advancement of the program. With **Elvira** for instance, we worked very closely with the buxom lady herself. **Waxworks** will have all the familiar on-screen information and execution moves we have seen before, but with faster animation, improved combat and a macabre storyline."

The scenario to the game runs thus: the player's life has changed since Uncle Boris was buried. This will be the first visit to the old hometown since twin brother Alex disappeared as a child. Uncle Boris had always been strange.

So obsessed was he with the demonic Netherworld, that he converted his old Victorian house into a Waxworks, and filled it with witches, old tarts, Vincent Price, and the entire Accolade marketing department. Let the meltdown commence.

Que? Que?

CORE Design have a new icon operated graphical adventure. In **Curse of the Enchantia**, the player takes the part of a twentieth century kid who has just been transported off to a magical world. Enter a witch who needs a young boy as an ingredient in a rejuvenation taco potion -- the player is unlikely target. The most unique features of the game are the interface and the chili sauce. The characters in the game talk in a graphical format. So if one character needed a burrito, he would have to ask a vendor, whereupon a speech-bubble appears ('Peso? Peso? I don't have no stinking peso!). **Curse of the Enchilada** is to be released in September in the UK on the PC and Amiga. Virgin Games will release the game in the US in November and in Mexico a month later.

Editor cells out shock!

COMING soon from Storm in the UK and RAW in the USA, **Dominant Species** allows the player to take an amoeba and guide it through its evolutionary processes to become the editor of *Strategy Plus*. To complicate matters, habitats change from age to age, and species which cannot adapt *(such as cheeky news editors - Ed)* will not survive.

Then there is competitive pressure. Other players will be developing competing stories. From the profusion of information (and editors), the player must plan, adapt, and improve, in order to dominate the world. **Dominant Species** is designed for one to eight players and will be released sometime before Christmas on the PC.

Fail Caesar

IMPRESSIONS are to release **Paladin 2** shortly. This is based on the original **Paladin** *(funny, that - Ed)*, but with virtually every facet of the game upgraded. Also included is a construction kit that enables the user to adapt quests or build faulty towers. Impression's **Caesar** is all about construction, ruling, defending and pacifying. The player stars as an ambitious Roman official hoping to become the Emperor. If the player also owns **Cohort,** they can boot that up and play the combat sequences in full tactical splendor. ❑

What's new, fluffy cat?

A new Microprose title involves Magnetic Scrolls. In **The Legacy**, the player must visit the house inherited from a deceased relative. The player walks around the corridors and rooms of this house and meets up with around 20 different creatures in residence -- and we're not talking about Fluffy the ginger tom -- some of which are controlled by an evil entity whose only aim is to control the house.

Graphics are the highlight of this game plus the auto-mapping and a windows interface.

Bits

Version 1.3 of **Harpoon** PC is now available and contains the following: a new and more accurate sonar model enhanced AI, improved torpedo and missile modeling, ability to view orders for user-created scenarios, ability to load user-created scenarios from the BattleSet menu.

Also new from Three Sixty is The **Harpoon Designers' Series**. This gives the user the ability to create enhanced versions of the original BattleSets. To create the enhanced BattleSets users must own the original BattleSets. **HDS** provides 12 scenarios for each of the enhanced BattleSets. The **HDS** BattleSets contain many new platforms, as well as additional countries and bases.

The Converted

Dark Queen of Krynn (SSI)
Amiga
(reviewed issue 22)

No Greater Glory (SSI)
Mac
(reviewed issue 14)

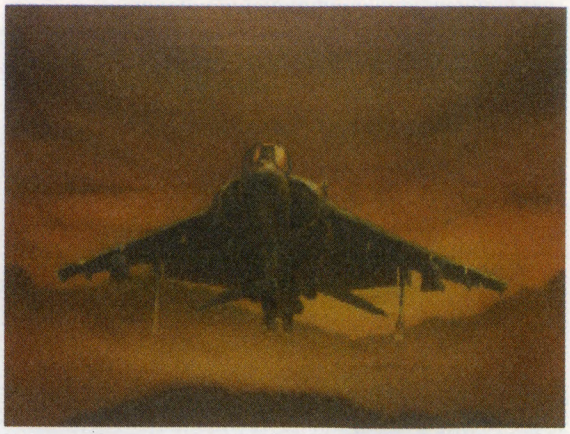
Secret Weapons of the Luftwaffe (Lucasarts)
CD ROM

Secret of Monkey Island (Lucasarts)
CD ROM

Robosport (Maxis)
PC for Windows Amiga

Cruise for a Corpse (US Gold)
PC

HARRIER JUMP JET



Paul Rigby hops aboard

The Harrier, the most successful vertical take-off aircraft, achieved fame during the Falklands War where it acted in an Alamo-like battle, fending off the potentially disastrous threat of the Argentine Air Force. Having one of the more complex flight models and modus operandi in the aviation world, the Harrier has thus been under-exposed in the computer simulation field. **Harrier** is the latest flight simulation under development by Microprose UK, whose Martin Moth and Leo Fouhy offered their thoughts on the project: "We've had a lot of help from RAF Wittering 233OCU" Martin told me. "The Station Commander said to us that 'if you're going to do a flight sim you might as well do it properly.'" And so the Wittering pilots offered their expertise in tweaking the flight model.

Elite plus

Microprose are still working on the stall model and the transferal from vertical to horizontal flight at the time of writing, but they were confident that their model was as close as they could get it. "The elite level will, hopefully, be as good as and as comprehensive as the real thing," Martin said. "There is also the problem of maintaining the correct viewpoint from the pilot's eyes so that he can relate to what he is doing to achieve the realistic reference points," Martin added. Microprose also confirmed that specialized maneuvers such as VIFFing, as used in the Falklands, will be possible.

The technical details will also be researched thoroughly: "The HUD will be correct to the Harrier. One of the things that the Harrier HUD does is that as you pull up towards the vertical, the ladder bars dip down and point in the middle towards the horizon so that it is much easier to keep orientated at any time," revealed Martin.

One disappointing factor did emerge from the discussion on research. Although the Harrier carried napalm during the Gulf War, it looks like this will be the only weapon that will be excluded. Personally, I can't see why that should be the case. If the exclusion of napalm is a moralistic gesture due to napalm's 'bad reputation', then why simulate a Harrier at all? Napalm does not have to be an anti-personnel weapon, either, the Gulf War, for example, saw napalm being used to ignite oil-filled trenches.

Microprose are very proud of their new graphic engine that they have developed for Harrier. "It is a fractal based landscape, a bit similar to **Midwinter 2**. But it will be gourad shaded so that it will be very smooth," explained Martin. Gourad shading actually takes the individual polygons and smooths them out. In addition, the join cannot be seen, resulting in an apparently seamless landscape. "You will fly down valleys rather than over them," explained Martin. "**Falcon 3.0**'s landscape started it with its fractal landscape but it was only a tiny portion of the whole game world. Prior to this, you only saw flat land with triangles and pyramids bolted on. We have taken it further so that you can, literally, scan a map into the computer and the computer will work out spot heights."

So, in theory, one could take a map of Scotland, scan it into the computer and then fly around Ben Nevis and down 'real' valleys and over 'real' rivers. Incidentally, even the game's objects, including the aircraft, will be gourad shaded. The fractal landscape extends to special effects such as waves lapping up on beaches and so forth, a feature first seen in **Midwinter 2**.

Chopper suey

The missions will include the standard primary/secondary target situation, where the player is told where to go, to shoot up the target, and to return to base. However, there will also be a full campaign system. Here, one will be able to run a campaign and take total control. This will involve flying out on reconnaissance missions, returning, and deciding to destroy specific targets. Also, targets that have been previously destroyed will still be destroyed when observed later on, or they will be under repair.

One intriguing feature in **Harrier** is that the player is in control of his own supplies. So if certain types of weapons run out, other ordnance may be used. The exciting aspect of supplies is that it is possible, whilst blowing up installations, to score an 'own goal'. If a bridge is destroyed, for example, that just happens to be on the player's own supply route, then no supplies would be received until the bridge is repaired! A classic instance of shooting one's self in the foot and a feature to be praised for its realistic connotations.

Missions will not require long flight times because the player will be based in a 'hide', a forward air base situated amongst a copse of trees, for example. Thus, the action will be on the player's doorstep. The basic fighting area is Hong Kong, with the Chinese being the villains of the piece. "This is something, generally, that no-one else has done," said Leo. "You'll see all sorts of different weap-

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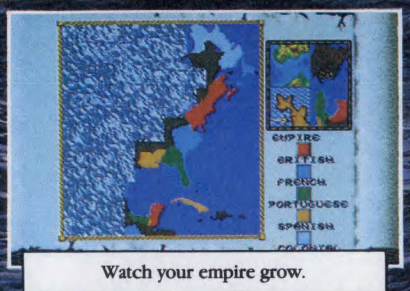

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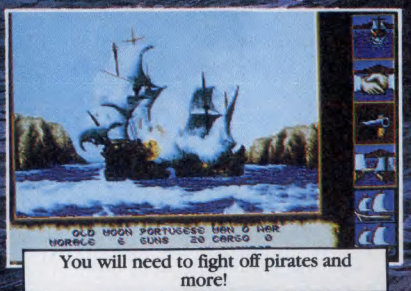

You will need to fight off pirates and more!

Impressions

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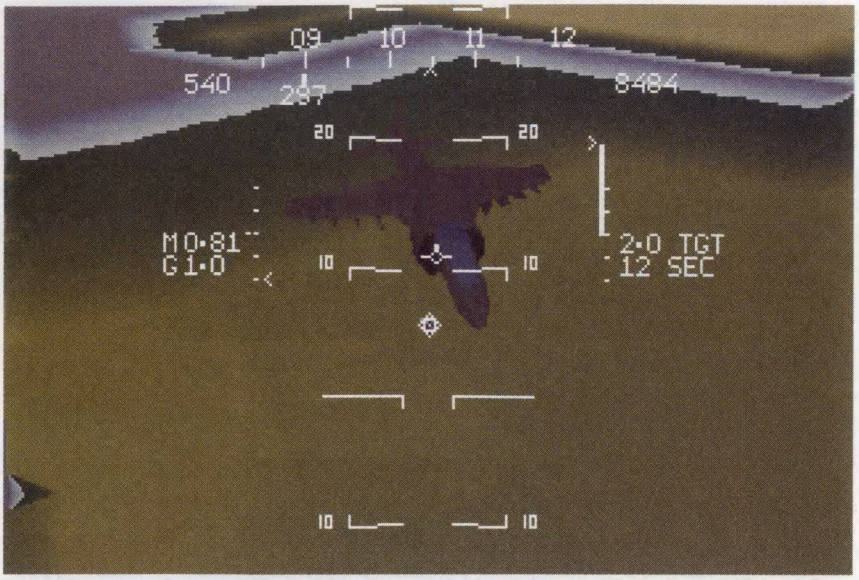

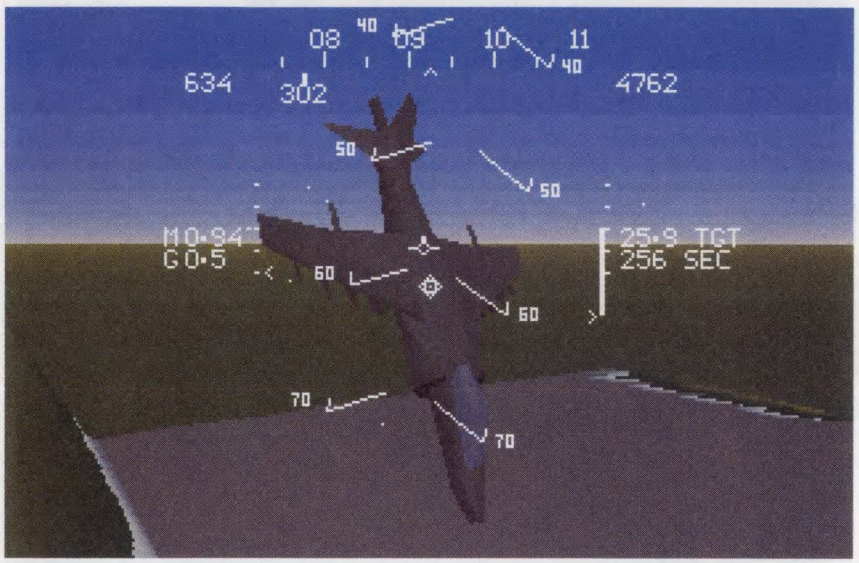

onry that may not have appeared before in games because the Chinese have a lot of old stuff as well as the new. However, we're making a few assumptions such as that they've got hold of some Russian MiG-29s."

Valley of the stalls

During the pre-mission phase, Microprose are looking to design an arming screen where one can grab individual weapons from the stores and place them onto the hardpoints using the mouse. "We are seriously considering using wing-men where you command a squadron of Harriers," offered Leo. Microprose are looking to integrate minor role-playing aspects into their wing-men. That is, the wing-men may improve their skills over time after successful missions. However, the player can over-work them to the extremes of fatigue, which will affect his performance in a negative fashion, a highly realistic feature which is hoped to be inserted. Leo added that "we are still working out how we can get you to talk to the wing-men. For example, you may see a particular infantry platoon on the ground. You'll be able to tell your squadron that, okay, that's your target, you go and destroy it."

The collision detection appears to have been finely tweaked. Firstly, the last thing any computer generated aircraft flying down valleys needs is to 'crash' whilst still several tens of feet away from the valley sides. Secondly, the Harrier is noted for its flexibility. So, if a flat piece of land is found that can support the aircraft, the plane will be able to land upon it. Leo added one caveat to that option: "There will be options that can be toggled on/off. Take wind, for example. The Harrier is very susceptible to wind. If you are hovering you have to face into the wind. If you're not, the wind will flip the aircraft over."

Cameo roll

"Something else which is unique in the game is the on-screen cameos," enthused Leo. "In most games when you fire a weapon, you see the weapon zooming out in front of you and that's it. What we are doing is that if you fire a Sidewinder off your Harrier, a small animation, which we call a cameo, comes up on the screen which shows the Harrier and the Sidewinder firing and lifting off the wing-tip and taking off. When you hit a target such as a tank, you will get a cameo of the tank being hit, blowing up and catching fire." "When Microprose showed that feature to the Harrier pilots they loved it" said Leo. "In fact, they just kept shooting Sidewinders off just to see it. The cameos are really short, but it gives you more of a feel that you have done something. Similarly, if someone fires at you, you may see a cameo of the front part of your cockpit where the bullets are getting shot up the side of the aircraft. Also, we are working on an ejection cameo where the canopy flies off and the pilot shoots out,' added Leo.

If the player lands behind enemy lines and is captured, there will be a little cameo addition there too. Finally, where possible, the artwork has been generated via a refined water- color/air-brushed look, then scanned into the computer and touched up, giving rather more atmosphere to these screens than might normally be the case in a flight simulation. ❑

Harrier Jump Jet will be published by Microprose.

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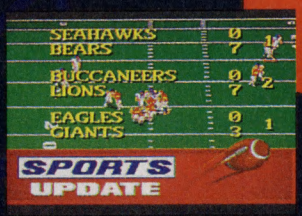

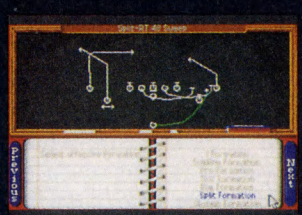

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F-15 Strike Eagle III

Design notes by MicroProse's Jim Day

In 1983, MicroProse published its **F-15 Strike Eagle** game, thereby leading the charge to opening up a whole new genre of home computer game: the mission-based combat flight simulator. The innovation of this product did not lie solely in the flight aspect of the simulation. It managed to introduce 'fun' into this genre of entertainment product by combining the action and excitement of arcade style shoot-em-ups with real world situational awareness.

F-15 Strike Eagle III puts the player in the seat of the US Air Force's hottest dual-role fighter aircraft - the F-15E. Equipped with the latest in high-tech weaponry, the player is charged with destroying a wide range of targets deep within enemy territory. In addition, air cover will need to be carefully chosen to eliminate any aircraft that attempt to intercept. Successful missions are rewarded with medals and promotions as the race commences to become the Top Gun at home base.

Carrying on the tradition of a game such as **F-15** can be a foreboding task. That is why Andy Hollis was asked to lend his talents to again work over the code for **F-15 III**. He did it once before, joining forces, in 1988, with the original author, Sid Meier, to produce **F-15 Strike Eagle II**.

Andy decided it was time to push the envelope a bit with the 3D graphics. He spent several months developing slick new visuals using high resolution (640x480) Super VGA graphics, but the results were disappointing in terms of frame-rate. It was now the winter of '91 and time was already running out.

New blood was brought into the project with the formation of the Simulations Group, within MicroProse, in early 1992. With Andy leading the group, we decided to re-double our efforts and pour on the resources.

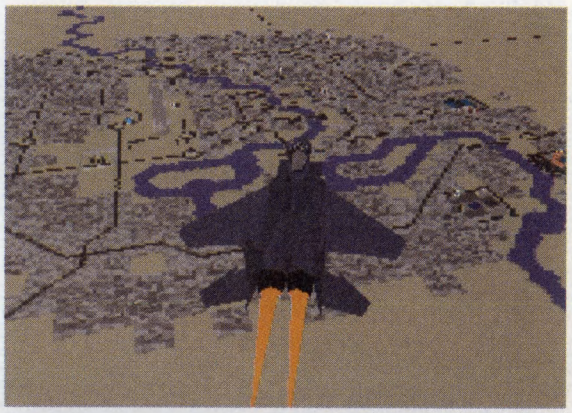
Another key person just walked in one day right through the front door in the person of our technical advisor, George Wargo. George had just retired as a Lt Colonel from the Air Force after spending the majority of his 20 years flying F-15s. Suffice it to say, with the exception of classified items, we now know exactly how everything works on an F-15.

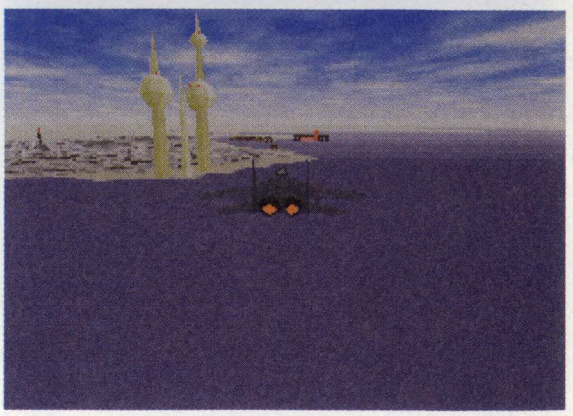
As more and more computers become interconnected, the possibilities for multi-player gaming abound. Since human opponents usually provide much more challenge than computers, modem play was one of the first things added to the game. Head-to-head competition in similar planes over friendly territory, and two - plane cooperative (wingman) modes were accomplished first. Later, since the F-15E is a two-seater aircraft, an innovative two-player front seat/back seat mode was added, in which one player pilots the plane watching for bogeys while the other performs the duties of the Weapons Systems Officer (WSO or Wizzo), designating targets and dropping bombs.

F-15 III should keep any armchair warrior engaged for a long time to come. Whether flying single missions in the Persian Gulf or engaged in a hotly contested campaign over the skies of North Korea, there will be plenty to choose from. Over fifteen different weapon systems, from GBU-89 Gators to AIM-120 AMRAAMs, are at the player's disposal to dispatch an aggressive opponent in a target rich environment. Those guys will be sending up everything from SA6s, streams of triple-A, to ultra modern MiG-29 Fulcrums.

Missions and targets will need to be chosen carefully. Meticulous target selection will ensure arrival in downtown Baghdad in one piece. The war was not won in a day, and neither will these campaigns be. ❑

***F-15 Strike Eagle III** will be published by MicroProse later this year*





Ed's note:
contrary to what has been reported elsewhere, MicroProse have no plans to make F-15 Strike Eagle III compatible with Spectrum Holobyte's Falcon 3.0

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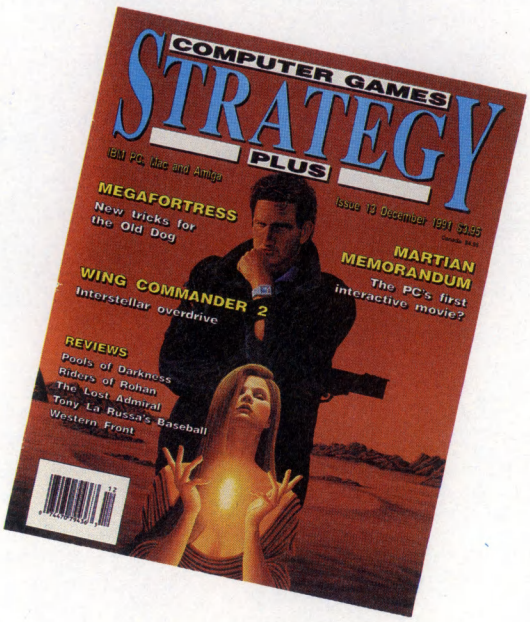

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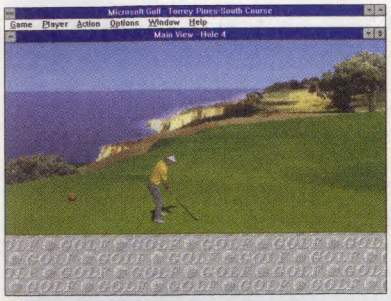

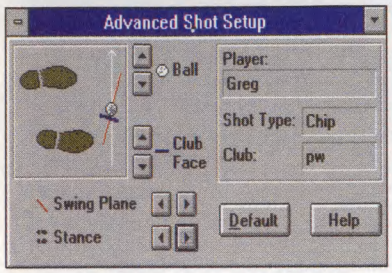

Windows Shopping

Microsoft's Windows, love it or hate it, looks set to becoming as much of a standard as anything could be in the PC environment. Despite it being a graphical interface, the games that are currently available for Windows would look equally at home on a Commodore 64. But two new releases this month could change all that.

From Maxis, comes **Robosport.** The Mac version was (favorably) reviewed on these pages way back in issue 12, so this notice is merely a reminder and a chance to look at how the game functions under Windows.

The perfect bound manual was written for the Mac version, though common sense can easily overcome any discrepancies. The tome is surprisingly beefy for such an apparently lightweight game and is more a testament to the wealth of options available than any complexity. Maxis say there may be problems for video systems running 256 rather than 16 colors, but I experienced no difficulties with the latter on a 386/40. The map resolution in Windows is as pin sharp as one would expect; an absolute necessity for a tactical game such as this.

The play of the computer opponent varied. The robots, as befits their nature, appear to have been rigidly programmed to adopt the same strategy each turn. The top level is 'ferocious' mode, but there is a school of thought that thinks 'stupid' is actually harder to beat. This is because the robots make moves which are *so* stupid as to be completely unpredictable. It's no big deal either way as **Robosport** is meant to be, and succeeds admirably in being, a fun game. In any event there is a variety of multi-player options: full modem and null modem links, network support, and two players at the machine. All versions are cross platform compatible via a modem. I played at 9600 and found the speed perfectly acceptable. At 2400 it could be on the slow side.

The network option for four players is the optimal way to play as this also permits team play. Ultimately the Windows port makes sense as it is the sort of the game that can be completed in the time it takes PageMaker to load. It can also recline in background, useful for those who play at work in between performing less important tasks. **Robosport** gets a firm recommendation but is not for those who considered **Global Conquest** 'silly'. As a multiplayer it is first class; the only flaw being the omission of a Hall of Fame.

There can be few superlatives left that haven't been used in connection with **Links**. So what does one say about **Microsoft Golf**?, which is, in effect, **Links** for Windows. The opening screens are quite a surprise to anyone familiar with the DOS version, but this is nothing compared with the shock of seeing how fast these screens redraw. I was expecting Windows to slow the program down to the point of tedium, instead these graphics fairly whiz along, much faster than the DOS version.

All the options such as configure stance, reverse replays, and so on, are present but many of them now have their own configurable screens. All of these can be minimized as icons and recalled as necessary. The terrain is still bitmapped, but the sprites are now hyper real, as per those in **Links 386 Pro**. Anyone who has the DOS based **Links** and wants to switch over to Windows, will be relieved to hear that all of the courses from the DOS version will be compatible with this program.

Microsoft Golf represents that company's re-entry into the world of simulations, and if it is an example of their future products in this field, then all I can say is 'keep 'em coming'. ❑

Brian Walker

ROBOSPORT

Designed by
Edward Kilham

Published by
Maxis

Systems
PC's running Windows 3.0 or greater
Mac, Amiga

PC Graphics
16 color VGA

Supports
Soundblaster and any soundcard with a DAC.
Modem play up to 19200 bps (the faster the better)
Networks using NetBIOS. Print option

Players
1-4 including teams

Notes
PC version requires 2 meg of RAM and a hard disk

MICROSOFT GOLF

Designed by
Vance Cook and Access Software

Published by
Microsoft

Systems
PC's running Windows 3.1 or greater

PC Graphics
256 color VGA

Supports
Any Windows compatible soundboard
Print option

Players
1-4

WORLDS AT WAR

The history of wargames by Ezra Sidran part 2

SSI's history of wargames

Baltic 1985 (1984)

Battalion Commander (1985)

Battle for Normandy (1982)

Battle of Antietam (1985)

Battlecruiser (1987)

Battlegroup (1988)

Breakthrough in the Ardennes (1984)

Carrier Force (1983)

The two events that most influenced and shaped society in the Twentieth Century were the great World Wars that first erupted in August of 1914. They subsided briefly in November, 1918 only to burst aflame in August, 1938, finally to be extinguished in August 1945. All facets of human endeavor -- art, literature, politics, and science, were indelibly touched by these global fire storms. Some, like music and literature, were affected indirectly and in response to the wars. Others, however, like wargaming and computers, played a crucial part in the events of the times and actually influenced their outcomes.

Russian gambit

Peacetime professional wargaming, like computers, did exist before World War I. All of the major powers incorporated wargaming into War College and staff exercises. The Duke of Cambridge, commander in chief of the British army, ordered its study in October, 1883. In January, 1905 the British General Staff actually conducted a wargaming scenario of a German violation of Belgian neutrality while executing a massive right flank attack on French forces to the south. This foreshadowed the real plan of Von Schlieffen by nine and a half years. Coincidentally, at the same time, the German General Staff was also employing the *kriegsspiel* to train officers of all ranks and to test certain combat principles. The Russians, too, advanced, though a bit haltingly at first, into the study of wargaming. After its initial adoption by Russian War Department in the 1870s, wargaming proved tedious and unproductive to the Russian General Staff. By 1903, the War Department was condemning the inability of the directors to arouse interest in the games

Wargaming, as it existed at this time, depended heavily upon the use of human umpires or games-masters not unlike the Dungeon Master in **Dungeons & Dragons**. Certainly, the director of one of these General Staff wargames played the key role and was more influential on the outcome of the scenarios than any of the actual opponents. Capricious whims of the director could have catastrophic effect as when Rear Admiral Ugaki, while presiding over the Japanese Staff pre-Midway wargame, overruled the dice throw of Lieutenant Commander Okumiya who was rolling to determine hypothetical bombing results on the Nagumo Carrier Force. Okumiya had determined that the Carrier Force had sustained nine hits and that both the Akagi and Kaga had been sunk. Rear Admiral Ugaki, however, refused to believe that the pride of the Imperial navy could be so quickly swept away, and promptly resurrected both carriers, a *deus ex machina* that could not be repeated in the actual event some months later.

Boffins at war: fleet tactical wargames being conducted at the Naval War College circa 1914

Theatre of war

Not surprisingly, the post-Spanish American war United States concentrated on fleet simulations that were conducted at the new Naval War College under the tutelage of McCarty Little. Little's effort attracted such attention that by 1897 the Assistant Secretary of the Navy, Theodore Roosevelt, would write that he 'wished to time my visit so as to see one of your big strategic games'. Fleet Tactical wargames were also conducted on a scale that quickly took over the floorspace of entire halls.

Computers, too, at this time were just becoming an entity unto their own. Charles Babbage, traditionally considered the Father of Computing, conceived of the Analytical Engine, a truly programmable, steam driven, mass of brass and pewter cogs, shafts, pulleys and dials. He died in 1871 before it was ever built, but Georg Scheutz constructed the less ambitious Difference Engine No. 2, which was purchased by the British government to aid in the calculation of actuarial tables that predicted life expectancy.

The 1890 U.S. Census was completed in record time (six weeks) by employing the Hollerith Tabulator, an early punch card reader. Eventually Herman Hollerith's Tabulating Machine Company evolved into the Computer Tabulating and Recording Company conglomerate which finally would become known as the International Business Machine Corporation, or IBM as it is now known.

Curiously, while the world's General Staffs were conducting their own wargaming experiments on the same general topic, no one thought to employ a mechanical calculator to facilitate combat resolution. Rather than becoming bogged down in long equations, we find these simple rules applied at the Naval War College games of this time: if two fleets meet with odds of 2:1 [then] the inferior will be removed; with odds of 3:2, the inferior loses one-half; with odds of 4:3, the inferior is destroyed, but the superior is crippled for the remainder of the game.

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Scientific enigma

The first military use of computers would be in the calculation of ballistics and gunnery tables. Analog computers, devices that consisted of interlocking wheels and cogs, were employed for aiming bombs from aircraft, calculating torpedo runs in submarines and directing battery fire on great floating gunnery platforms like the Bismarck. Obviously, these were important uses of computers, and they certainly achieved direct results; nonetheless, the great watershed events in the history of computing that occurred during World War II would take place in a country manor house in Hertfordshire, England known as Bletchley Park. It was here that a group of mathematicians were employed breaking the highest priority German codes.

These codes, devised by an analog German machine called Enigma, produced streams of numbers that were translated back into text by a receiving Enigma machine that possessed the proper code wheels (gears and cogs, again). However, one of the British boffins (whiz kids to Americans), employed at Bletchley Park was the incomparable genius Alan Turing, the author of a paper, On Computable Numbers, which when published in 1936, laid the groundwork for modern day computer science.

Turing began work on the Colossus 1, the first electronic computer that employed vacuum tubes (valves to Brits), instead of gears; and by December, 1943 the German Enigma ciphers were being translated so quickly that Churchill and Roosevelt were reading the German dispatches before their intended recipients. It is impossible to overstate the importance of the breaking of the Enigma ciphers in the outcome of World War II.

Part of the beauty of electronic computers was that they could be reprogrammed for different tasks. Turing had been speculating about what these different tasks might be long before the computers existed that could perform them. But by 1951, shortly after Turing wrote an article entitled, Digital Computers Applied to Games, Dr. Prinz of the Manchester University was able to program a computer that solved the first chess problem.

Deep thought

The post-war 50's were a time when both computers and wargames exploded into public view. A February, 1958 Scientific American article, Computer v. Chess-Player, shows author Alex Bernstein pondering a move before a hulking IBM 704 computer. Interestingly, he writes, 'Undoubtedly our chess player [program] is only a prototype for far more skilful players to be built in the future. Probably they will not go much further in depth of planning: even with much faster computers than any now in existence it will be impracticable to consider [for the computer to look] more than six half-moves ahead'. However, by April 30, 1990, The *Wall Street Journal* was able to report that the Deep Thought brute force computer was able to evaluate one billion possibilities a

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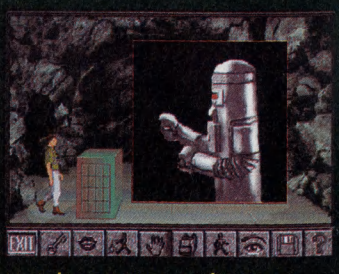

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second and routinely looked forty or more moves ahead between turns (Deep Thought has a U.S. Chess Federation rating of 2,552 - 2,650 which would make it, if human, a grandmaster. Deep Thought has lost only to Gary Kasparov, the highest rated chess player in history).

It was also in the 1950's that Charles Swan Roberts II first developed the board wargame **Tactics,** which by 1958 would be revised (in what was the industry's first upgrade) to **Tactics II** and would be marketed by his fledgling company, Avalon Hill.

Like most of you, my first introduction to wargaming was a Charles Swan Roberts design. Roberts is certainly the most important figure in Twentieth Century wargaming not only because of his many major contributions to wargame design, but because he introduced so many people to wargaming itself. If you are over twenty-five years old, your first wargaming experience was probably either a Roberts designed game or a game designed within Avalon Hill. We are probably all familiar with the now standard wargaming hexagons. It was Roberts that introduced the RAND Corporation's top secret hexagonal system to the general public in 1961 in Avalon Hill's **Chancellorsville**.

On the boards

With the exception of Games Research's **Diplomacy**, released in 1961, Roberts had the entire commercial wargaming market to himself. And with good reason: he invented it. Avalon Hill's contributions to the science of wargaming during the 60's are an unequalled achievement. They introduced commercial wargaming itself; and by 1964, they were selling 62,000 units a year. I vividly remember anxiously waiting for each new Avalon Hill release to see what they would invent this time. **Tactics II** was my initiation into wargaming. **Gettysburg** (also released in 1958) was the first accurately researched historical wargame [by the way, if anyone out there has an original copy of **Tactics II** or **Gettysburg** with the rectangular pieces and measuring stick, please contact Intergalactic Development].

D-Day and **Waterloo** were released in 1961. **Bismarck**, featuring hidden movement simulated by a cardboard screen that separated the two players who tracked ship movement on identical notepads, was released the next year. **Stalingrad** (the first Eastern Front wargame) shipped the year after. Supply units and logistics were introduced in **Afrika Korps** in 1964, the same year that **Midway**, the first carrier wargame was released.

James F Dunnigan designed **1914** for Avalon Hill in 1967. Mostly what I remember of **1914** was the multitude of counters; some were dummies and which existed only to confuse the opponent. Also, **1914** had a myriad of optional rules and scenarios that mimicked diplomatic situations that came into play, depending on various military incursions into sovereign territories.

By 1970, the wargaming industry had mushroomed into a 129,000 plus units a year business. Though Avalon

- Field of Fire (1989)
- Fifty Mission Crush (1984)
- Fighter Command (1983)
- Germany 1985 (1982)
- Gettysburg: The Turning Point (1986)
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(1987)

Red Lightning
(1989)

Reforger '88
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Second Front
(1990)

Shiloh: Grant's Trial in the West
(1987)

Storm Across Europe
(1989)

Tigers in the Snow
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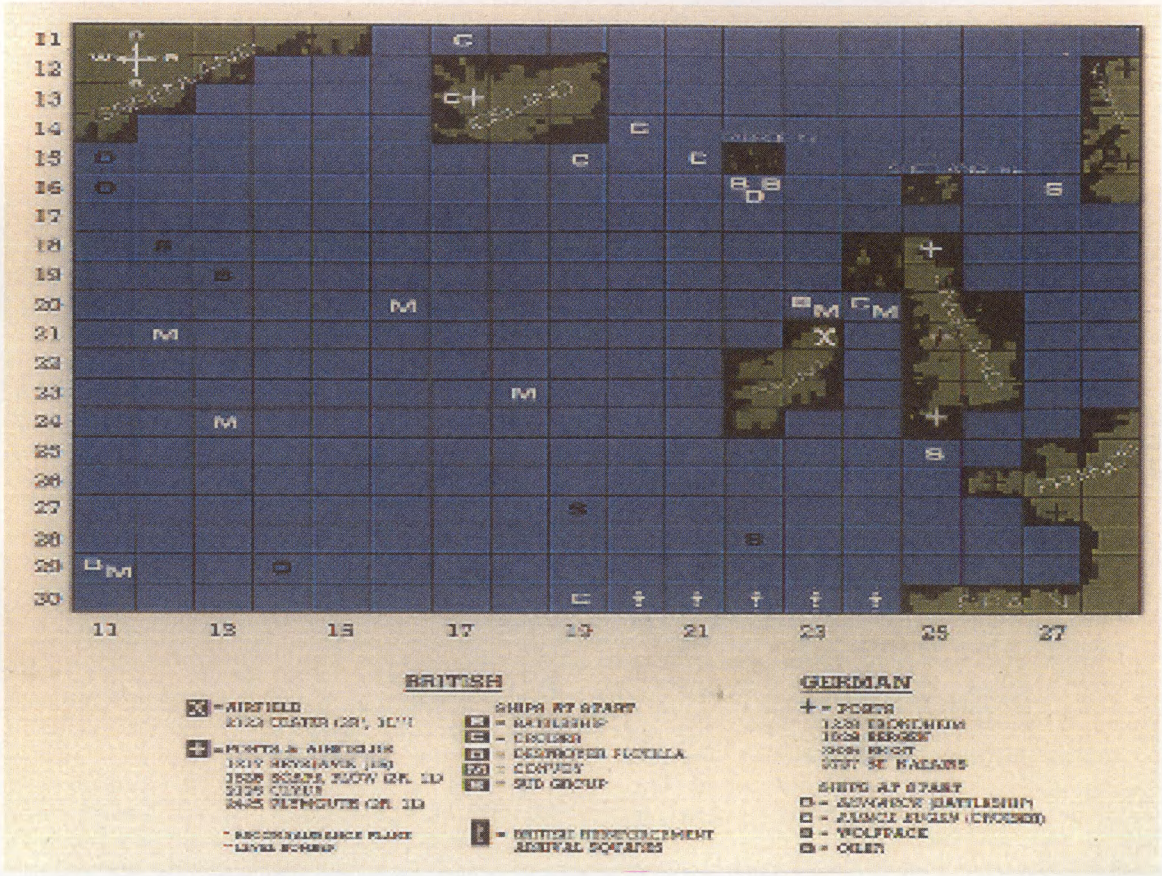
(1985)



Computer Bismarck: the $2,160 wargame

Hill still controlled about 95% of the marketplace, competition had arrived in the form of SPI, Gamescience and others. In 1972, the last year that reliable sales figures can be ascertained for board game sales, the industry produced 337,280 units. At about this time, three Illinois State University students, Frank Chadwick, Rich Banner, and Marc Miller, met at a college sponsored gaming club. The next year, the three, now newly incorporated as Game Designers Workshop, produced their massive WWII eastern front game, **Drang Nach Osten**. The follow up, **Unentschieden**, continued the game from 1942 to 1945. GDW also created the Europa series of interconnected detailed WWII scenarios. Because all of the Europa scenarios can be joined to form one huge wargame, GDW probably holds the record for the largest commercial wargame ever produced.

The 70's were the glory days of boardgames. *Strategy & Tactics* magazine estimated that there were as many as 100,000 hard core gamers at this time. Many new companies joined the industry and hundreds of new products were released. Board wargames became increasingly complex and detailed and were inevitably accompanied by thick rule books, stacks of tables, and charts that modified dice throws.

Computers at war

At the end of this decade two important events occurred: first, microcomputers became available for the home market; and secondly, market surveys (the first conducted by Joel Billings before he incorporated Strategic Simulations, Inc. SSI for short) showed that the demographics of wargamers and computer owners overlapped (i.e. wargamers were the kind of people who bought home computers). In addition to crunching the myriad of numbers that wargames now used, computers could add the feature of hidden movement and, perhaps most importantly, a computer opponent that would always be available to play with.

The honor of writing the first commercially sold microcomputer wargame belongs (like so many firsts) to Chris Crawford (author of **Patton vs. Rommel** and **Balance of Power**). On December 30, 1978, Bill Henson of Woodland, California drove over to Crawford's house to purchase the first copy of Crawford's **Tanktics** (written for the Commodore PET). The age of commercial computer wargaming had now begun.

This first microcomputer wargame did not have any graphics capabilities and consequently input and output was done via entering lines of text that referred to coordinates on a printed map (see Figure 4). However, not having to worry about screen graphics allowed Crawford to concentrate on the other problems inherent with computer wargaming: hidden movement, line of sight (LOS) calculations, and Artificial Intelligence (the computer general itself).

At the same time that Crawford was programming, and later selling, **Tanktics**, Joel Billings, working with John Lyon and Dave Cook, was working on Computer Bismarck for the Apple II. Less than two months after Crawford sold the first ever microcomputer wargame, SSI made their first two sales: two copies to San Antonio Hobby and fifty copies to Los Altos Computerland. This

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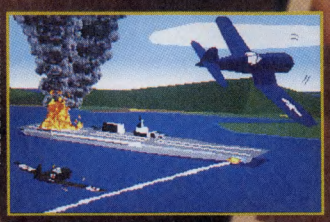

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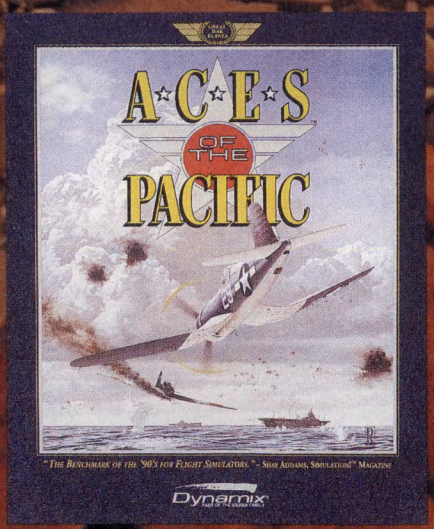

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Computer Gaming World.

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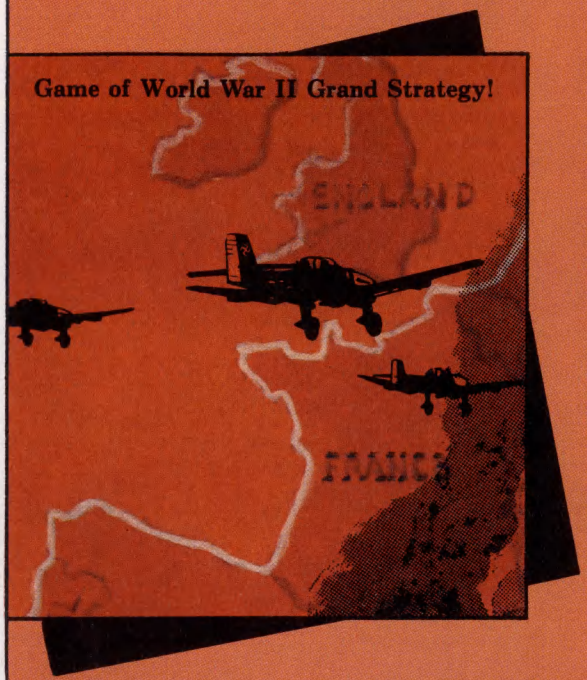

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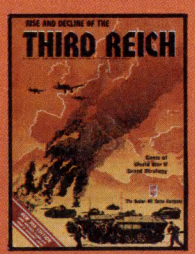

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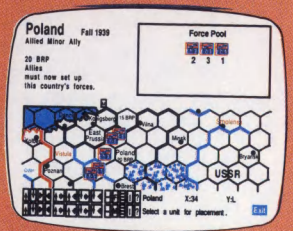


Patriot: is this the future?

is the key difference between **Computer Bismarck** and **Tanktics**: SSI was looking to sell in quantity and SSI was writing for the Apple. Indeed, SSI and Apple were so closely tied at the beginning that the first **Computer Bismarck** was advertised as The $2,160 Wargame (the software was $59.95 and the Apple II $2,100).

The Apple II had many advantages over the Commodore PET, not the least of which was a 278 by 192 by 8 color (kind of) monitor. This allowed for pieces representing the ships and a pretty good four-color map of the North Atlantic to be displayed). The map was sectioned off into a 20 by 18 matrix and squares. **Computer Bismarck** was packaged with a fine 15 page manual that would have been familiar to any of the old board wargamers. There were plenty of charts and tables (Ship Shadow Resolution, Chance, Weather, Fog Probability, Plane Attack Combat, Submarine Attack, Surface Combat, etc.), but this time the computer would deal with them and simply report the results. Also, the computer could hide ships from opponent' s view. Also in 1980, SSI released **Computer Ambush**, **Computer Napoleonics**, **Computer Conflict** and **Computer Air Combat** (after which SSI felt secure enough in the marketplace to drop the 'Computer' from all future product titles). Sales for SSI in 1980 topped $300,000 and then shot up to $897,000 the next year, probably making it the largest producer of wargames (board or computer) at the time. SSI's all time best selling wargame was Roger Damon's **Wargame Construction Set,** which moved over 53,000 units after its 1986 release.

Universal simulations

At about this same time, military historian Dr. Edward Bever teamed up with the now legendary Sid Meier at MicroProse to produce the Command Series of microcomputer wargames. Starting with **Crusade in Europe**, released in 1985, they went on to jointly author **Decision in the Desert** (same year) and **Conflict in Vietnam** (1986). The Command Series was, and is, unique in its realtime ebb and flow of simulated battlefield management.

While commercial microcomputer wargaming was taking off, the academicians with their mainframes were also creating wargames. Walter Bright at Caltech began writing **Empire** (Interstel) in FORTRAN-10 in 1976. In 1984, it was rewritten in C for the IBM PC, after which Mark Baldwin did a major revision (v. 2.0) for the Atari ST and Amiga. It was during this time that I began work, while still in college, on the original **UMS** for the Apple IIe. Though this version was never released, it led to a contract with Firebird Licensees to produce an Atari ST version. Eventually, the original **UMS** would be released for the IBM PC, Amiga, Macintosh and Apple IIGS as well. Over 107,000 program and scenario disks have been sold since 1987. This probably makes **UMS** the best selling computer wargame of all time.

How popular has microcomputer wargaming become? According to the January 1992 issue of *PC Computing,* war games comprise the largest segment (36%) of the home software market. And, as home computers become faster and have more memory, programmers and developers are being pushed by the public to make even more detailed simulations. Among this latest generation of computer wargames are the naval simulation **Harpoon**, and soon **Patriot** (from Three Sixty), **The Perfect General** (published by Quantum Quality Productions, Inc.) and our own **UMS II: Nations at War**. One thing is certain: the rest of this decade will see greater advances in the complexity and accuracy of microcomputer wargames. ❑

War in Russia (1984)

War in the South Pacific (1986)

Wargame Construction Set (1986)

Warship (1986)

Waterloo (1988)

Western Front (1991)

Wings of War (1985)

This article was first published in the newsletter of *Le Guerrier,* published by Intergalatic development and edited by Ezra Sidran. Subscriptions are available free of charge from: Intergalactic Development, 1427 Washington Street, Davenport, IO 52804

Special thanks for help in preparing this article are owed to: Chris Crawford, Linda Blanchard and Chuck Kroegal at SSI, Neil Shapiro, and Commander Ahlwardt of the Naval War College Museum.

Ezra Sidran is also the designer/ programmer of the following games: UMS and UMS II. His latest game, Jack the Ripper, will be published by Intergalatic Development next month.

HIGH COMMAND

Preview by Brian Walker

Strategic level wargames are still something of a rarity. Gary Grigsby's games for SSI spring to mind as does **Storm Across Europe** from the same company. Add to these **High Command** from Colorado Creations. 'CC' is comprised of Gregg Carter and Joseph Nonnast, two physicists who, ironically, work for competing companies. Both keen wargamers, they embarked on this venture four years ago, using what spare time they had to put into the game. Back in those days the PC was something of a joke as a games machine, so it was the Atari ST to which they turned. The graphics in the version now available were programmed on that machine, and then ported to the PC in midstream when the importance of the PC as a leisure machine became manifest.

What if?

The graphics in the game are functional at the very least and a lot better than wargamers are used to, the aforementioned **Storm Across Europe** for example. The game is played out mostly on a tactical screen, though a strategic map is available. Map scrolling is very smooth and efficient: a right mouse click does the trick. Scenarios are plentiful, the main one being the campaign game which consists of 72 turns. These are long turns as the number of units in the game is quite large, and, in addition to the usual combat/movement phases, there are production/diplomacy interludes. This section of the game is very well thought out indeed. The player has a number of points which he may allocate as he sees fit. This means the game can also be played in 'what if' mode. For example, what would have happened if countries like Sweden had been persuaded by diplomatic overtures to side with the Nazis?

A turn is conducted in phases, the first of which is Force Allocation wherein newly produced units are deployed. The second phase is Resource Allocation, this is where resources such as oil are transferred to factories. Political Allocation also occurs as a sub phase within this. In the Air Allocation phase, air units are assigned to missions. This is simply a matter of clicking on the appropriate icon and defining its destination via a series of highlighted hexes. The Air Execution phase follows immediately afterwards. The Naval and Land Allocation phases work in exactly the same way. Topping all this off is the manual, which weighs in at 200 pages plus and is chock-full of tables and charts so beloved of the anal retentive community.

Come in Colorado

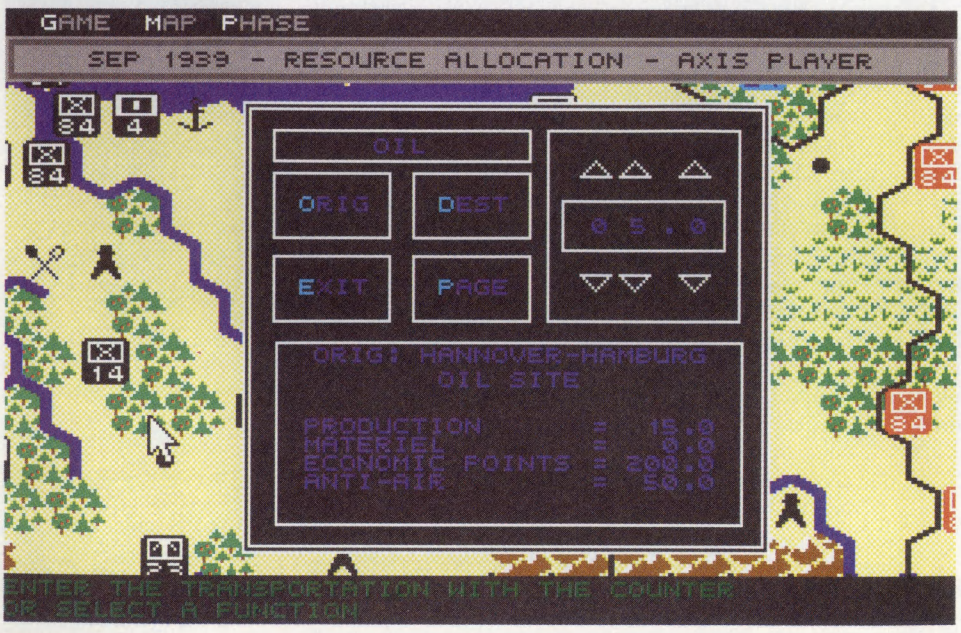
Despite the plentiful options, both designers wanted more, as Gregg Carter told me: "There's tons of things that we would like to have put in the game but we had to call it quits somewhere. We've been over four years on this. For example, we thought of putting names on the map, but the way we had to put scrolling in prohibited this.

"We plan on doing updates. These will include minor fixes, easy-to-implement new features, better-balanced scenarios. These will be available free to registered users. Eventually there will be a completely new version. We're looking at VGA, modem play, sound board support, better interfaces at certain places, more than two players (up to six), save game anywhere, etc, etc. It all depends on what we think is feasible, what the public wants, and what we want. We are definitely going to be listening to the consumer. We figure there will be a nominal upgrade fee for the new version.

"The scenarios were designed to be fun and somewhat historically accurate, although not down to a gnat's eyebrow. However, we are developing an editor that will be available fairly soon. It'll let users add or delete units, modify units, change political alignments, etc.

"We also are thinking of adding the ability to modify some of the internal simulation parameters. Maybe it will be possible to change the relative losses in combat, probabilities of detection, movement costs, production, costs, etc. I don't know for sure if we'll be able to do this, but if we can we will. That way, hard-core gamers can adjust design parameters that they don't agree with. We believe that with all the dedicated wargamers out there, they'll probably come up with better scenarios than we do. After all, we spent the past four years designing, programming, and debugging this beast, not playing games." ❑

***High Command** will be reviewed in our next issue*



High Command, published by Colorado Creations for the IBM PC should be available now

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Features:- Effortless menu system; Take full command or delegate, Authentic Battle Plot; 21 display/status boards; smoke, star shells, flares, searchlights, radar, weather, burning oil slicks and ***much much more!!!***

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FIRETEAM 2200 A tactical wargame set in the 23rd century. Fight alone or command a *"Fireteam"* of up to 16 units.

Features:- 30 different combat units; 25 weapon systems; modem play between IBM and Amiga.

$49.95 IBM, Amiga (1mb)

WORLDS AT WAR A game of planetary conquest for 1 or 2 players that can be played as a small tactical study with the flavour of a chess game, or for a weekend as a campaign game with vast regions of territory to explore!

Features:- Configurable battle map from 10 x 10 to 50 x 50! Bombers, missiles, scouts and ***much much more!!!***

$49.95 IBM, Amiga (1mb)

ALSO AVAILABLE

BLITZKREIG A WWII simulation of *"Battle of the Bulge"* with sophisticated AI. Based on the GDW boardgame of the same name.
$49.95 IBM, Amiga (1mb)

WHITE DEATH WWII simulation of one of the battles around Stalingrad; detailed AI. Based on the boardgame of the same name.
$49.95 IBM, Amiga (1mb)

COMING SOON

SPACE INC A simulation/RPG of interplanetary trading. Encounter pirates, sabotage, financial problems and ***much much more!!!***
$59.95 IBM, Amiga (1mb)

FLEET COMMANDER From the designers of the award winning **ACTION STATIONS** comes a new WWII naval simulation. All of the historical accuracy of Action Stations with carriers and submarines. State of the art VGA graphics. *$59.95 IBM, Mac, Amiga (1mb)*

DOMINANT SPECIES A strategy game based around the theory of evolution! For 1 to 8 players *(human or computer)*. You create new species to survive and thrive. More than 30 billion species to develop. *$49.95 IBM*

RAW

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SIM CAN STORY

Profile by Steven Newburg

We at Simulations Canada cut our teeth on Avalon Hill board games (didn't everyone?). In fact, those long ago ads of 'You now command...' are in some ways at the heart of our design goals. Board games never really even came close. Far too much information (of almost all types) was directly available to the player. The strategic board games, if they were simple, came closest to the viewpoint of the commander of a nation at war or a grand alliance. But the tendency of boardgames to get more complex over the years soon destroyed that. And the much more common (and more popular) operational and tactical level board games were always totally unreal.

When we started doing board games back in the mid seventies, we thought that could be corrected to some degree, though no one here ever felt board games could be brought to a level of true command viewpoint simulation.

For 10 years, SimCan produced a line of very different board games that some people liked a lot, and many people disliked intensely. But we made money, had fun and produced some good stuff. Then the personal computer came along.

Simulations Canada's history of wargames

Naval Battles

Seventh Fleet

Fifth Eskadra

Pacific Storm: The midway campaign

Pacific Storm: The solomons campaign

Malta storm

Long Lance

In harm's way

Kriegsmarine

Fleet med

The Ocean Lifeline, 1939-1944 (now out of print)

Battle of the Atlantic

Grand Fleet

Land Battles

Middle East,

Main Battle tank: North Germany,

Main Battle Tank: Central Germany

Golan Front

Battle Tank: Barbarossa to Stalingrad

Battle Tank: Kursk to Berlin

Moscow Campaign

Stalingrad Campaign

Kursk campaign

Sieg in Afrika (out of print)

Rommel at Gazala

Rommel at El Alamein,

Fall Gelb

Operation Overlord

To the Rhine

In moderation

With the computer to moderate information flow and decision points (since it could know all of the rules and interaction while the player need not), actual viewpoint for command would become possible to simulate. We jumped into computer simulation very early, and again, with a rather different form of game.

Most of the companies that went into computer games really did only one thing. They provided a computer opponent for (usually) one side or (occasionally) both. In almost all other respects, the games remained board games in design scope, content, and production. The map was likely on the screen, as were the playing pieces, and the games tended to be rather simple because most effort had to go toward producing those screen graphics; but otherwise, it was pretty much like playing a board game.

In one way this was very good, because it provided an easy transition for board gamers. In another way, it was very bad (from our viewpoint), since it did not produce enough difference to get players to think any differently. We originally thought that all this would change over time, as the companies got the idea of what they could do with the computer. Well, we were wrong. It has been over a decade since the first personal computer wargame simulations came out, and a vast majority of the current crop are still pretty much computerized board games. There has been a bit of movement on limited intelligence on opposing forces, but not much. The combat resolution systems themselves have got a bit better, but again, most are still fairly simple and are displayed in the rules booklet, so a plan can be worked out in advance. The graphics and user interfaces are a lot better. Most of the effort has gone into this department, with the result that computer opponents are still only marginally intelligent.

The eyes have it

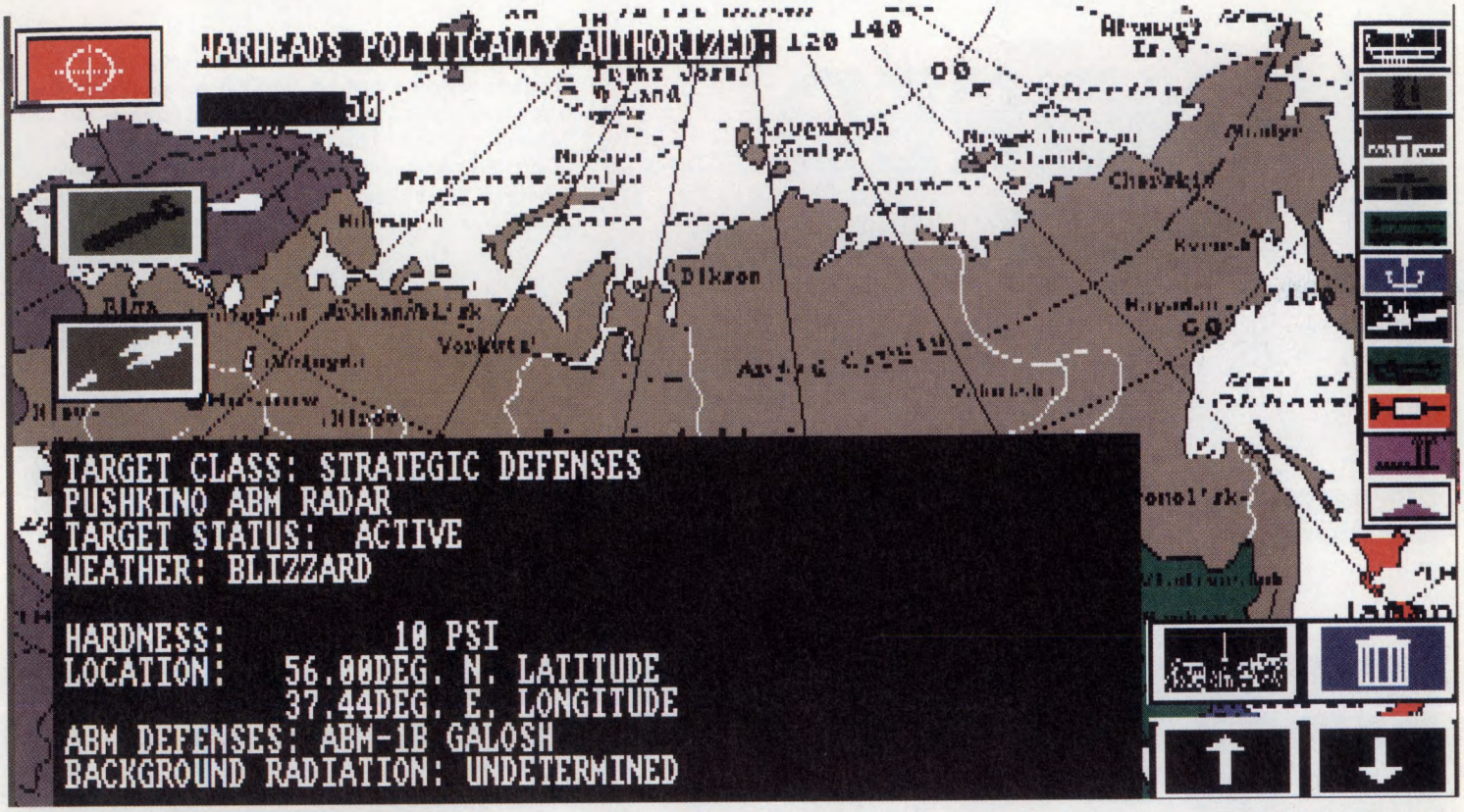
It is a bit of an irony that most early reviews tended to think of our computer games as 'computerized board games,' because we continued to include printed maps and playing pieces, while the real computerized board games, those from SSI and such, were thought of more often as computer games.

We decided from the first, that what we wanted was to get that true command viewpoint from the old Avalon Hill ad. So, we organized the design of each game around a particular set of eyes. That may be those of the Battalion or Regiment commander of a WWII formation such as in **Battle Tank: Barbarossa to Stalingrad,** or those of the Commander of Forces, South Russia as in **Stalingrad Campaign**.

With this in mind, *all* information must be limited to produce a viewpoint, and decision points must also be limited to reflect the abilities of the command position depicted. This means we cannot hand over for examination the resolution systems, the sighting systems, the data collection systems, the countermeasures' interfaces, or even complete data on forces, for the viewpoint depicted, would not know these things. No one around here expects to get rich doing our type of simulation, nor do we expect to become famous. But we are having fun... ❑

Steven Newburg is the CEO at Simulations Canada

BRAVO ROMEO DELTA



ATTENTION... THIS IS NOT A DRILL!

During a major Soviet naval exercise, 50% of the ballistic missile subs are deployed to sea and a limited nuclear strike is launched on American targets. At 3:58AM NORAD picks up the first incoming nuclear warheads, targeted for US Air Bases, and with less than 6 minutes to impact.

As the Chief Target Planner at the Strategic Air Command, it is your responsibility to launch a limited second strike. The targets selected should demonstrate the resolve of your political leadership, while not escalating the conflict.

Defined by the Federal Preparedness Agency (FPA), a controlled conflict is, in part, one in which the contending powers use or threaten to use military force, including nuclear weapons on a scale restricted enough to avoid precipitating a general war.

This concept of Escalation Control is the strategic policy embodied in the Presidential Directive 59 (PD-59) which states that the U.S should be able to initiate the limited or selected use of strategic nuclear weapons, and to control the escalation process in such a way that democracy would continue to "prevail" in the post-war world.

The implementation of PD-59 is your job. **Bravo Romeo Delta** gives you complete command of U.S. Strategic forces, including ICBMs, SLBMs, SSBNs, Bomber Bases, and provides you with all tactical warning and attack assement complements of NORAD. This is a real-time simulation, with no punches pulled.

When you've perfected the US strategy you can switch sides and become the Commander of the Strategic Rocket Forces for the U.S.S.R. Within the same scenario, you must prepare to respond to the American counterstrike, while adhering to the Soviet nuclear targeting strategy, and shifting the CoF (Corelation of Forces) in favor if the U.S.S.R.

Bravo Romeo Delta has a suggested retail price of $59.95.
Available for Amiga and MS-DOS

SS-18 Satan: The largest, most powerful ICBM ever built, the SS-18 is a two stage, liquid propelled 'heavy' missile. Available with either a single, highly accurate, high yield warhead, or 10 MIRVs (multiple independently targeted reentry vehicle), the Pentagon claims that the SS-18 was "specifically designed to attack and dstroy ICBM silos and other hard targets" in the USA.

Single Shot Kill Probability (SSP_k)
Given a warhead yield (Y) in kilotons, accuracy in meters, and target blast hardness (H) in PSI, the following equation is used:

$$SSP_k = 1-(0.5)^x$$

Where x can range from:

$$x = (1340Y^{1/3} / Accuracy)^2$$

for soft targets (0-50 PSI hardness) to

$$x = ((438Y^{1/3}/H^{1/3})/Accuracy)^2$$

for hard targets (over 1000 PSI)

More than 80 percent of Soviet ICBMs, carrying more than 95 percent of the Soviet ICBM-based warheads are ready to be launched within minutes from their day-to-day alert status. 30 to 40 percent of Soviet SSBNs are on day-to-day alert, with roughly 20 percent of Soviet SSBNs on station at any given time to launch retaliatory strikes. -- Potapov, I.N. Nauchno-tekhicheskiy progress i'flot (Voyenizdat, 1977) p. 129

*(From the **Bravo Romeo Delta** Designer's Notes)*

Free Spirit Software

Free Spirit Software
720 Sycamore St
Columbus, IN 47201
(812) 376-9964

HUNDRED YEARS WAR

Preview by Peter T Szymonik

Designed by
James F Dunnigan and Alfred A Nofi

Programmed by
Daniel Masterson

Systems
All computer types

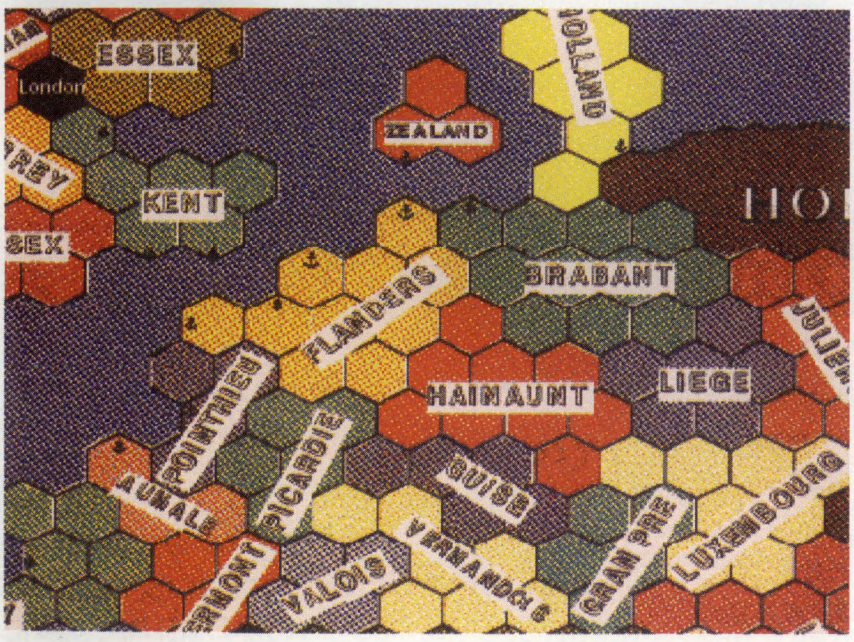
Cost:
$6/hour on the GENie Network

Scheduled Release date
October 1, 1992

On-line multi-player games are hot and the GEnie network has always had some of the best games available on any network. What are these games like? Imagine a number of PCs networked together, all playing the same game. The actions of one player directly affect what another player sees on his screen. For instance, in the on-line game **Air Warrior**, the player takes to the skies in a fighter plane and shoots enemy aircraft out of the sky. The difference is that those enemy planes are actually other players who are logged into the network and playing the same game!

Until recently most of these on-line games were drab, text-only affairs. Now GEnie is offering sophisticated 'front-end' programs for its on-line games that turn the text screen information into a colorful and realistic game screen that parallels off the shelf computer game programs. Most of these multi-player on-line games have been either flight simulators (ie **Air Warrior**) or role-playing games (ie Gemstone), but GEnie is set to release something completely different.

Hundred Years War (HYW) is a new multi-player on-line game designed by two very well known board wargame designers, namely, Jim Dunnigan and Al Nofi. They have teamed up with master programmer Dan Masterson to create what may be the most complex, yet completely playable computer simulation ever designed. **Hundred Years War** is unique in that it is a wargame, a simulator and a role playing game, all in one.



Allo 'allo

The game is set in 14th century Europe just before the outbreak of the **Hundred Years War** between France and England. The game scale is 90 historical days to one day of real playing time, so playing the game from start to finish will take about 400 days to complete. Each player in the game is assigned an actual historical figure, a family to raise and care for, and a number of fiefs to manage for God and country. There can be up to 306 players in one game and the system allows multiple games to be run at the same time.

The detail in this game is amazing. Rumor has it that the actual game itself was designed way back in the late 1970's, but that no computer existed at the time powerful enough to run it. Apart from the 306 player moderated historical figures in the game, there are also over 6,000 non-player-characters (NPCs) that can be hired by the players to help run the family estate or as traveling companions. These NPC's include such noted personalities as Joan of Arc and Robin Hood.

Jousting for position

As in any well designed Role-Playing-Game (RPG) each individual player character and NPC is rated according to a number of personal characteristics. These include leadership, drunkenness, legal skills, jousting skills, debauchery, etc. Every one of the hundreds of individual fiefs is also rated according to population, fortification and military strength, language, chance of rebellion, and a number of other statistics. A 4.5' x 2.5' map (see illustration opposite) representing the playing area can either be ordered by mail for $5, or downloaded from the **Hundred Years War** file libraries. The map stretches from Scotland to Spain and from the Atlantic Ocean to the western part of Italy.

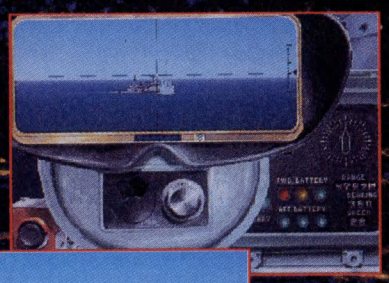
One especially interesting aspect of the game is that the player can 'clone' himself by getting married and having children. Should the player's character die of disease, a hunting accident, or in combat, the player automatically assumes the role of the next of kin, be it the character's wife or one of his children.

Travel itinerary

The game itself can be mastered in about a day or two. The game is entirely menu driven. Family affairs, household affairs, financial affairs, and the like are all available as sub-menus from the Personal Options menu. Armies and fleets can be raised using the Army management menu, etc.

The only exception to this is the Travel menu. After selecting this option, a graphical display made up of text appears on the screen showing the player his present position on the map and neighboring fiefs (ie if the player is

A legendary year in the history of naval conflict has returned.



Actual screens may vary.

The Pacific Solomons 1942. Setting for a series of naval confrontations that would change the course of World War II. And the setting for the first in a new series of spectacular Pacific War simulations from MicroProse.

Task Force 1942 is your chance to command a fleet of destroyers, cruisers, and battleships against aggressive enemy forces in the South Pacific.

No detail has been overlooked in this painstakingly researched simulation. Torpedo wakes. Thrilling night combat. Blinding explosions. Flares. Even harsh weather conditions. All presented in breathtaking realism.

Issue commands to ships and convoys. Fire torpedos into enemy backsides. Control crucial battle positions. Shell enemy targets. Confront enemy ships head-on. And, if you choose, lead the Japanese forces into battle.

Task Force 1942 from MicroProse. It's the *only* way to experience the thrills...and risks...of naval combat in World War II. To order, visit your nearest retailer or call **1-800-879-PLAY.** Call today.

TASK FORCE
1942
SURFACE NAVAL ACTION IN THE SOUTH PACIFIC™

MICROPROSE™
ENTERTAINMENT • SOFTWARE

180 Lakefront Drive, Hunt Valley, Maryland 21030-2245

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For IBM-PC/Tandy/compatibles.

Reader Service No. 5

located in Swansea, that will be displayed at the center of the screen with the option to move to a neighboring fief, for instance, hit 2 to move Cray which will be displayed in the upper right hand corner of the screen.)

A graphical front-end for **HYW** is slated for release sometime next year, but the current menu system is more than adequate.

A detailed glossary, rulebook, and various playing aids can also be downloaded from the **HYW** file libraries. These explain every option in detail and a quick read of these will allow the player to get up and running in the game in a short period of time.

Should the player get stuck along the way, there is also help to be found in the **HYW** Roundtable, a message area where players can exchange information and write letters to their King and the Pope.

HYW also has a conference area on GENie. This acts like a nationwide conference area with one important twist, the conference is set up as a medieval tavern. Players can enter the conference using their character's persona and enjoy a round of ale, they can play medieval games, or engage in a ballroom brawl!

Pope of peace

No noble is an island in this game. As a member of the French or English Royal House, the player is likely to be asked to run certain errands for the King (one player from each side is elected and appointed to play the role of King Edward III or King Phillippe of France at the start of the game.) The King can appoint a player manager of his select fiefs, or the King can assign a player a Royal Title, such as Warden of the Northern Marches or Lord High Admiral. Once appointed to these positions, the player has added responsibilities, be it defending England from Scottish raids or defending the Coast of France from English fleets.

Once the actual war breaks out, the real fun begins. Now players are no longer simply fief managers, they have to raise armies and defend their lands from foreign invaders.

The player assumes the role of a military commander marching under the flag of England or France. Enemy fiefs can be raided, pillaged, sieged, and keeps can be stormed and captives taken (the opposing player's NPCs.) These can be tortured, ransomed, or executed outright as the player sees fit. But such dastardly actions do have a price. There is a sort of Gamesmaster 'Pope' overseeing the game and if he feels that a player is acting outside of God's will, the player can be excommunicated.

The game is won by tallying points scored by the players. Players are rewarded for successfully storming enemy castles and for successful fief management. But the real reward here is being involved in a game where the player is competing against other real people. See you in Camelot! ❑

TACKLE THE BEST

Computer Football like you've never seen it!

Explore the exciting and physical world of professional football at its finest. Turn on the heat with an offensive attack that showcases your best personnel, then dare your opponent to get through a defense that blitzes and stunts at every opportunity. Play up to fourteen games at the same time as you coach your team to the Super Bowl!

AN ALL NEW CHALLENGE

The PREMIUM EDITION includes:
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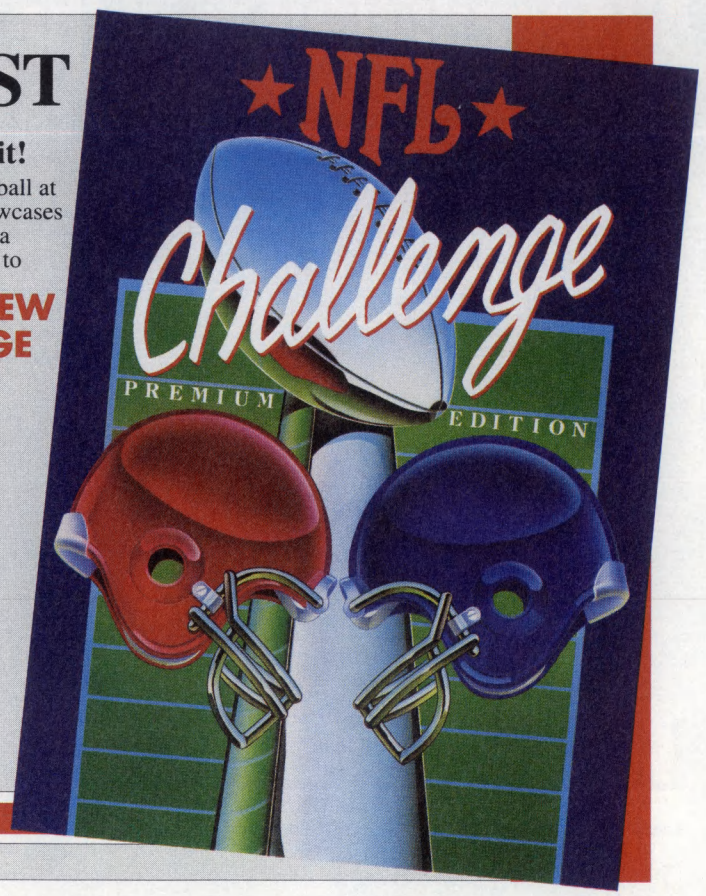
- Best simulation model available - includes the Run & Shoot!
- External Stats Compiler and full League Support
- Digitized Sound Effects
- Choice of Human or Computer opponent
- Weather conditions, multiple game injuries, and much more!

NFL Challenge™ PREMIUM EDITION sets the standard all computer football games are measured against! TAKE THE CHALLENGE ... Grab your playbook and HIT THE FIELD!



HOW TO ORDER:
Available wherever great computer games are sold, or call: 1-800-635-2425
Mon-Fri, 9am-4:30pm CST - with VISA/MC/AMEX
Requires VGA graphics, 640K and a Hard Drive
Apple Macintosh version available soon.

NFL™

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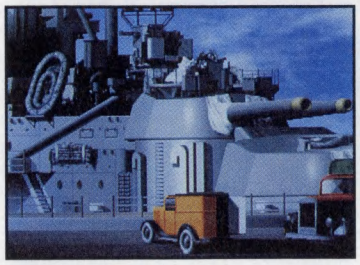
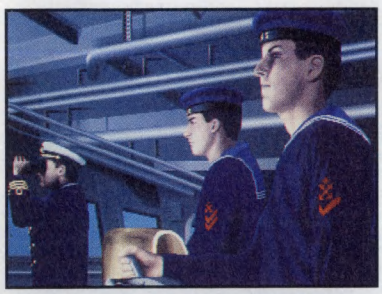
Reader Service No. 83

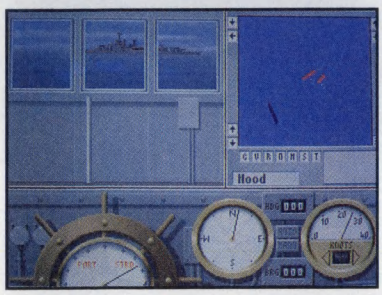
Pilot 42,000 tons of steel with big guns blazing!



When you want an advanced simulator with *real* power, play GREAT NAVAL BATTLES™: NORTH ATLANTIC 1939-43. Its state-of-the-art graphics and animation put you on the bridge of the great German or British battleships and cruisers of World War II.

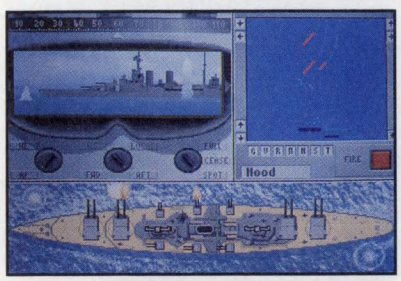
Choose the CAPTAIN'S VIEW and steer majestic ships like the *HMS Hood*; go to full power and watch the action on the screen as 42,000 tons of steel respond to your command. Listen as dramatic sound effects re-create the roar of guns as you fire them. Watch the shells splash in the distance or explode on target. See the flash of enemy guns and feel your ship vibrate as she's hit. Take command even through the toughest North Atlantic storms!

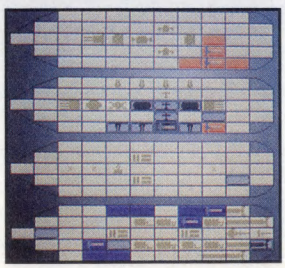


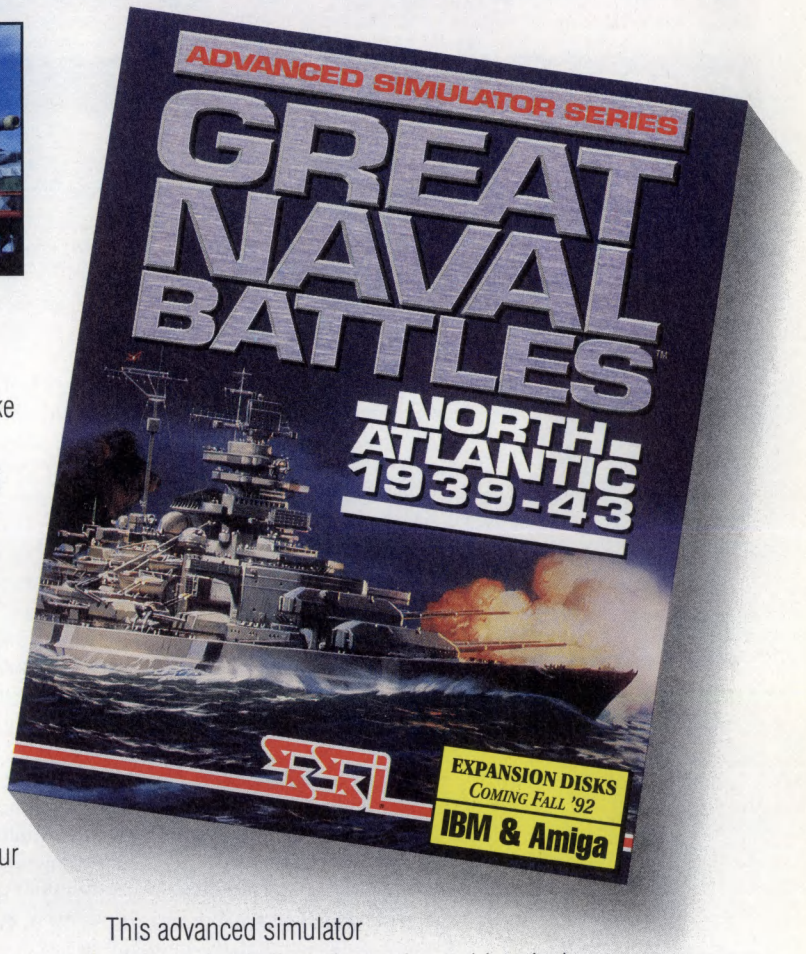


You can also watch the action from the FLEET VIEW, an eagle's-eye look of the individual ships of a task force, or the GRAND ADMIRAL VIEW, a strategic display of your entire navy and all visible enemy vessels on a map of the North Atlantic.

Fight the entire campaign, mini-campaigns or individual battles as the British navy seeks to protect her transport ships from German predators. All the action happens in real time or you can compress the scale. There's even an instant replay feature.







This advanced simulator also boasts the dedicated attention to historical accuracy and detail for which SSI is renowned: extensive online ship data and specifications; detailed damage report by deck; even stunning cinematics to heighten the historical drama.

GREAT NAVAL BATTLES.
Awesome *simulator*.
Incredible *simulation*.

TO ORDER: Visit your retailer or call 1-800-245-4525 (in USA & Canada) with VISA or MC.

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IBM 256-color VGA screens.

STRATEGIC SIMULATIONS, INC.®

XCONQ

X Windows xtra by Richard X Lawrence

Designed by
Stanley T. Shebs and John Bradley
Shareware

Systems
Unix running X Windows

Supports
16 color and mono graphics.

Players
1-8

Availability
Access to a Unix machine that is connected to the Internet; a huge international network of computers.

Many PC users view UNIX systems, and espe cially mainframe UNIX systems, as cumber some, slow machines featuring a cryptic text based interface that only computer wizards could understand. Some might even look down on UNIX systems, admitting that they are fine for large projects but could never measure up to the ease of a PC with a graphical interface.

But the UNIX world has a quiet secret, one that belies the image many people have of it. UNIX gained a graphical interface years ago, long before PCs had Microsoft Windows. The UNIX world had a long history of groups of programmers working on large projects together. Most UNIX systems were already networked when PC machines didn't know the meaning of the word. And when not burdened by a high number of users, UNIX machines often outperform their PC counterparts by a huge margin. All of these factors combined to create an environment that allowed creation of games, yes games, with features and playability that would put the best PC programs to shame, and most of them are free. **Xconq** is just such a game.

Golden empire

On the face of it **Xconq** most closely resembles the famed **Empire** game, which also had its origins in the mainframe world. But **Xconq** offers a wealth of features far beyond what **Empire** did; and after years of development now only superficially resembles its old counterpart. One of the most interesting of those features is that **Xconq** is totally configurable - while maps can be generated randomly with conventional units (armor, infantry, etc.) just like in **Empire**, users can also create their own 'period' files that range everywhere from prehistoric combat (with Neanderthal tribes and woolly mammoths) to futuristic combat using spaceships.

When invoked, **Xconq** brings up a large window which has within it several sub windows. The most important, and largest of these, is the map window, which displays the explored terrain in hexagons, much like traditional war games. Unexplored areas are simply black. A smaller window to the lower right displays a shrunk down world-view of the entire map.

Keep on the grass

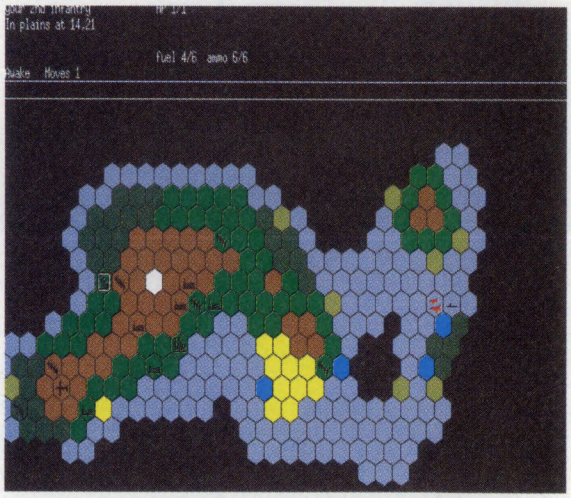
Other displays are for a variety of information. To the right of the map is a set of icons showing the different types of units, how many of them exist, and how many are in production. To the upper right is a list of all the players, and who they are allied with (indicated by a common color). Depending on the scenario several players can join in; games of up to eight players are not unusual. Directly above the map are two important windows: one shows vital information for the current unit, and the other is where messages from the game are displayed.

Turns are divided six phases: spy, disaster, build, supply, movement, and consumption. Each can have various results depending on the period configuration. Movement is where player interaction takes place and is also where combat will occur (when two opposing units move into the same space). Consumption is the last phase, and is where any deplenishable resources that the unit uses will be reduced. This creates a whole level of complexity beyond the standard **Empire** type game, as care must be taken to keep a unit near where it can resupply (for instance, infantry must be near grassland to get food) or it will be lost.

Morale factor

Another important feature that affects strategy is that units have morale and there is a chance they will revolt or surrender if it is poor. Morale is reduced when a unit is low on resources and especially when it is surrounded (often a problem with sea or space units). If units revolt they return to whichever alignment they originated from - that is, if the city they came from is an enemy that has since been captured, they will become an enemy unit.

Surrender requires that units be present from the opposite side to surrender too. An **Xconq** game ends when any



of a variety of victory conditions have been met, set from the period file. Usually this means eradication of one side or another.

After the entire game is over the last player alive can end the game with a keystroke, and **Xconq** will save a statistical file that describes by turn what happened during the game, useful for diagnosing the reasons for victory or defeat. Although usually played as a multi player game, the computer opponent will offer the sole player a tough challenge. This, and the configurable game system means that in short, **Xconq** is, xcellent. ❑

*Notes: review based on version 5.05. **Xonq** requires UNIX (either BSD or System V variants), a C compiler, and the X Windows system from MIT, revision 3 or later. Compiled code requires about 1MB of hard drive space, minimum memory would be 8MB for most platforms. A display of 800X600 or better is highly recommended.*

SIEGE

The hordes approach! Is the moat full? Are the archers on the battlements? Is the drawbridge raised? Are the cellars full of food and water? Are there plenty of bandages and splints? Are the cauldrons of oil boiling atop the towers? Can your castle withstand the ***Siege??***

Mindcraft presents: ***Siege***. Finally, a strategic simulation of pulse pounding, thought provoking medieval style castle assault.

Historical and Fantasical elements combine to challenge your leadership with a never-ending variety of contests and dilemmas. Do your knights sortie against the rabble outside your gates? Can your spies learn the enemy's plans in the dead of night, and return to tell the tale? Is your wizard still strong enough to shroud the enemy camp in sheets of flame to halt their progress?

Siege gives you four castles to attack and defend. You can't do it all yourself; you must depend on your vassals and their troops, each with his or her own abilities and skills.

Attack or defend in any one-castle scenario, then test your mettle in extended campaigns to prove your mastery of the art of Siege. Or design your own scenarios. What if Highrock Fortress were held by trolls, or Usk'hem Gart by elves? More castles, more scenarios, and more campaigns are on their way from Mindcraft.

MINDCRAFT

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Actual screen photos from the IBM VGA version.

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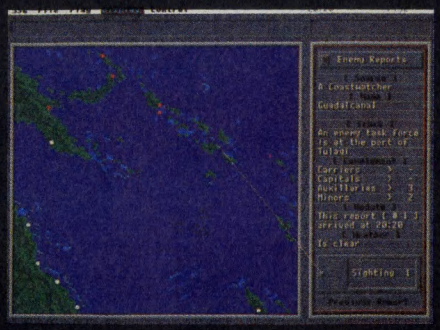

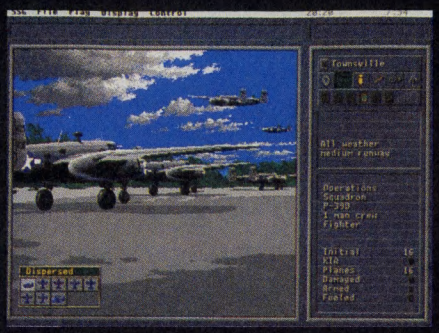

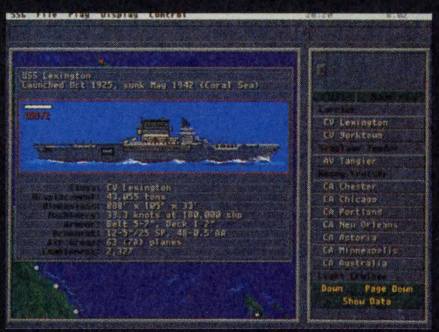

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THE ROAD FROM SUMTER TO APPOMATTOX 1861-1865

Design notes by Laura Williams

The largest war fought in this hemisphere was the American Civil War, a conflict that left behind it thousands of casualties, burnt cities and almost tore a nation in two. The war, however, generated not only destruction but also considerable lore surrounding the personalities of the leaders and the lives of the regular soldiers. What makes the war interesting to the wargamer is not only the larger than life personalities, but the fact that the war lay between the old horse and musket period and the dawn of the age of 'factory wars'. The early battles would have been familiar to a Napoleonic general, but by the time Petersberg, Virginia was besieged, the battle landscape resembled the trench warfare of World War I.

We at Adanac Command Systems, in our decision to produce a simulation of this conflict, have attempted to bring to the player not only a regular wargame but have included several features that should provide him or her with a feel for the period. Wargames, whether cardboard or silicon, in many cases provide the standard map and counters but fail to convey to the player the war itself. Many games could be pretty much any period, it's just a matter of changing the unit designations. Our first release, **The Road From Sumter to Appomattox, 1861-1865**, has been designed to avoid this problem.

Against all odds

The simulation itself covers the war in two different scales. We chose to do this, as otherwise the very important eastern theatre would be too small to allow for the strategies of the period to take shape. On the other hand if the western theatre were at the same scale as the eastern, the memory limits of our computers would have to be enormous to fit the necessary maps. The end result allows for lots of maneuver room in both theatres without anyone having to spend several hundred dollars on memory upgrades. The time scale of the game is the same throughout, ticking by in 4 hour pulses and allowing for the player, acting as the commander in chief of either side, to enter orders at any time.

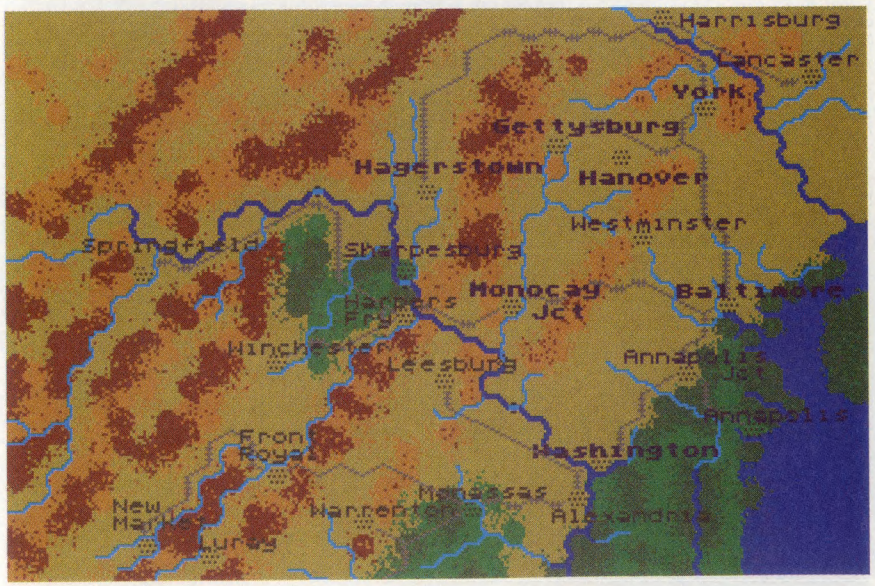
The game contains over a hundred individually named and rated leaders that bring different skills to their tasks. General McLellan is not simply a General Lee with less initiative and imagination, in fact his ability to inspire confidence and trust in his troops is unequalled on the Union side. On the other hand, General Grant's inability to accept defeat makes him a decisive leader when a player needs someone that will push on despite the odds. The names of these leaders are used to add personality to the armies, corps and divisions of the game, personality that cannot be generated by 'unit number 7'.

The graphics in the game are many and varied, no hex-maps here. The colorful maps and units were designed to provide not only the functionality expected of a wargame but to be pleasing to the eye as well, being as the player is going to be spending a lot of time looking at them. Newspaper headlines, using the historical font of each paper, provide information on key events. Finally, period photographs are used to provide the player with historical information on weapons, battles and personalities. The game itself is full of scenarios that take into account the limited time available to many players while still allowing for those who don't mind spending a weekend playing the full campaign. There are several possible entry dates to the campaign, each can be played through to the end of the war or instead to the end of the period of interest to the player.

Tactical battles, putting the player in the role of an army commander, are included covering Gettysburg, Antietam, Shiloh and Chickamauga. The tactical combat system is included as an option within the campaign and as a stand alone game. A full scenario editor has also been provided, allowing players to design their own games or modify those provided. The system puts players in the role of a battle commander and concentrates on being a fast, challenging study of Civil War combat that players can have some fun with.

Overall, the game gives the player a lot to do as decisions covering all facets of the war effort have to be made, from leader promotions and dismissals to running the production system. Other features such as railroads, naval operations, a very complete supply system, international and state politics and the 1864 election are all part of what we hope gamers will find to be an exciting simulation. ❑

The Road From Sumter to Appomattox, 1861-1865 *will be published by Adanac Command Systems this fall for the PC and Amiga*



WAR DOWN UNDER

The SSG story by Gregor Whiley

Strategic Studies Group is an all Australian game company, founded in Sydney in 1982 by Roger Keating and Ian Trout. It has been producing games for personal computers since that time. Roger had previously programmed a string of successful games for the US game company Strategic Simulations Inc, while Ian was proprietor of the famous Napoleons Military Bookshop in Sydney. Roger and Ian's first game together as SSG was **Reach For The Stars**, a now-classic game of space colonization and conquest, released in 1983. **Reach For The Stars** was also the first SSG game to be ported to 16 bit machines.

Carrier struck

The next creation from the Keating/Trout team was **Carriers at War**, released for the Apple II and C-64 in 1984. This game has now been completely rewritten to suit the capabilities of the latest IBM hardware. It will feature high-res VGA graphics, animated combat reports, mouse based interface and sound board support. The game itself has been greatly expanded, and now simulates ships, planes and combat in much greater detail. It also features WarRoom, SSG's new intelligence system.

After the first **Carriers at War** came **Europe Ablaze**, a simulation of the air war over Europe, released in 1985. This game also has its devotees; but while it can be said that **CAW** just fitted into 64K, **Europe Ablaze** just didn't. Controlling the RAF during the Battle of Britain is still probably the toughest job SSG ever programmed, but the game couldn't give quite enough feedback to make it a totally successful process.

Next to see the light of day, in 1986, was the legendary **Battlefront**, the first game in what was to become a long and successful series. For a system originally intended only to cover WWII land battles with a maximum of three divisions per side, Battlefront has proved remarkably flexible in both the periods and the scale of the battles simulated.

A large number of scenarios for the Battlefront system have appeared in *Run 5*, SSG's own gaming magazine. First published in 1985, the seventeen issues published to date contain extra scenarios for SSG's game systems, historical articles, reviews of selected games and other useful info.

Road to Moscow

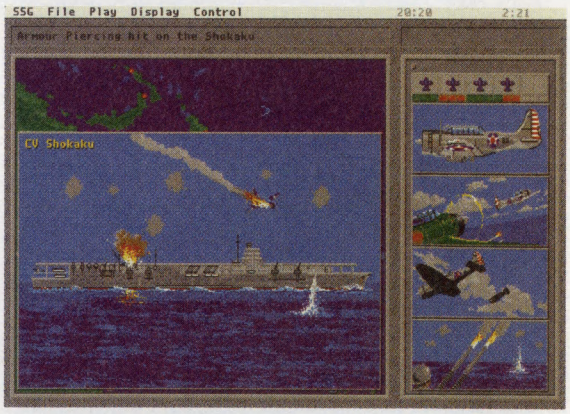
In 1987, SSG felt duty bound to make the long advance on Moscow, and released **Russia** for Apple II and C-64. Any strategic Russian Front game must handle extremes of material, space and time. **Russia** did very well with the first two factors, but was not perfect on the last, nevertheless it was still a very popular game. Despite a mountain of requests, some promises and a few false starts, SSG has not released a 16 bit game on the subject. Neither Napoleon or Hitler could resist the lure of capturing Moscow. How long SSG can hold out remains to be seen.

1987 also saw the start of another pilgrimage with the release of **Decisive Battles of the American Civil War, Volume One** for the Apple II and C-64. The Decisive Battles system was a very accurate simulation of the problems facing a Lee or Grant on the field of battle. Formations could be out of communications, and sometimes did the wrong thing. Personal intervention was the way to get things done, but even Lee could not be everywhere at once. Worse still, even a General could get shot if he became too heroic too close to the action!

Colonial conquest

Gold of the Americas, first published on IBM in 1989, was in some ways a return to the **RFTS** style of games. Players are one of the four colonial powers, England, France, Spain or Portugal, ruthlessly contending for supremacy in the New World. Although it roughly followed history, emphasis was on game play and flavor. Most gamers exhibit a (well adjusted) streak of megalomania, and the prospect of founding an empire, whether in space or the New World, has always appealed.

SSG's most recent release is **Warlords**, an epic fantasy/strategy game for eight players. **Warlords** has been a runaway success, appealing equally to the hard core war-



gamer, general strategy gamers and role-players. **Warlords** was voted Wargame of the Year by *Computer Gaming World Magazine*, and Strategy Game of the Year by *Strategy Plus* magazine. The IBM and Amiga versions were released in 1991, followed by the Mac in 1992.

SSG is not making any official pronouncements on their future releases after **Carriers at War** at this stage, though there are some straws in the wind. But a game as successful as **Warlords** surely demands some sort of sequel, doesn't it? ❑

Gregor Whiley is the General Manager at SSG

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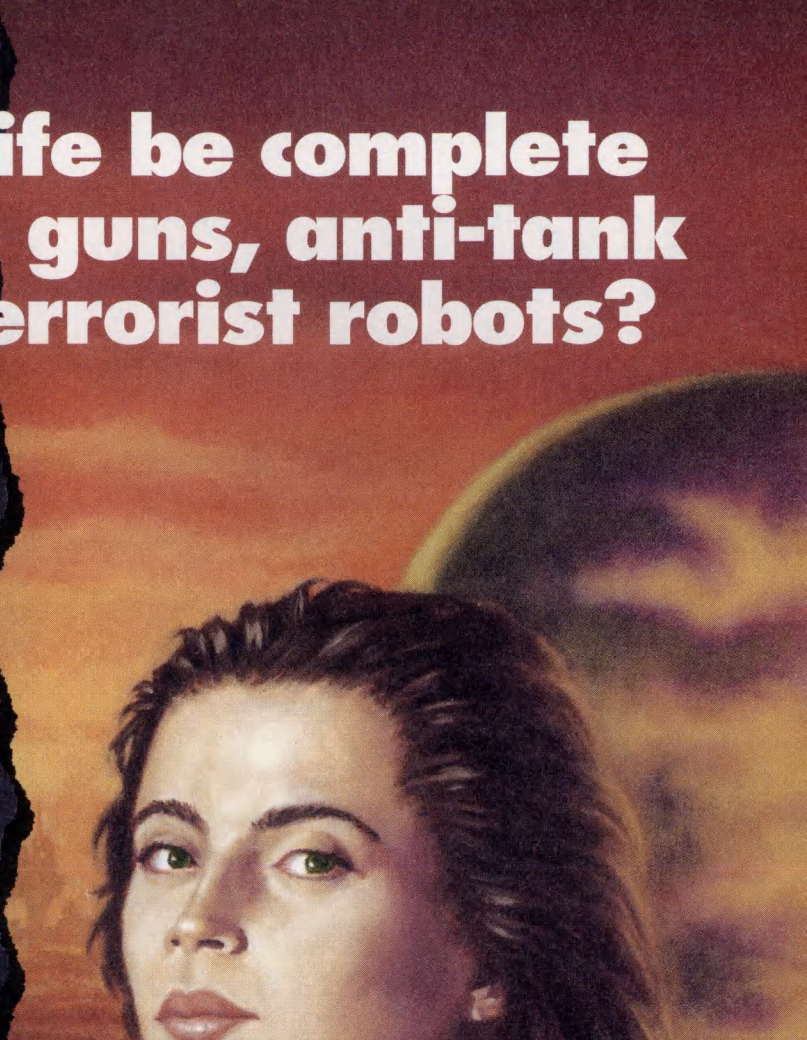

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VICTORY AT SEA

Design notes by James F Dunnigan

This article is an edited extract from The Wargames Handbook, to be published in December, 1992 by William Morrow and Company.

Victory at Sea is a game on naval warfare in the Pacific during World War II. In effect, it's a strategic game of the entire war in the Pacific with the option to drop down at any time and fight it out ship to ship (or, more likely, aircraft to ship). It's the first of a series of games. Additional disks will be published later to cover other theatres of the World War II naval war. The following are notes on the game specifications submitted to Three Sixty Pacific at an early stage of development.

The Map Displays

At the moment you have a list of ports and instructions to scan any Pacific region map into your paint program. Then implement latitude and longitude coordinates to overlay the posts list onto this map. Because a degree of longitude varies as the cosine of latitude, the length of a degree of latitude varies from 69 miles at the equator to zero at the poles. We don't go quite that far, but do reach two thirds of the way to the north pole (60 degrees north), meaning the degree of latitude is under 50 miles that far up.

The map will have to be adjusted. That should be no problem as you will have the 140 principal locations listed in terms of latitude and longitude. We can supply more as needed, although we don't want to crowd the map. We counted over 500 atolls and islands capable of supporting some kind of garrison (many at great expense in shipping, as even water would have to be brought in to some of the drier ones). Some of these were actually garrisoned by the Japanese (Tarawa). Once you have the map sorted out electronically, send it to me and we'll indicate the atoll clusters. I thought it better to leave that complication for last. It will make some programmer's life easier.

Databases

The databases are complete, although we'll update them right down to the wire as we uncover new stuff. Nothing radical, but there's always something. As all the databases are in spreadsheet files, we can put them in any form you want for uploading into the source. I do that a lot. I don't like it, but I've gotten pretty good at it.

Algorithms

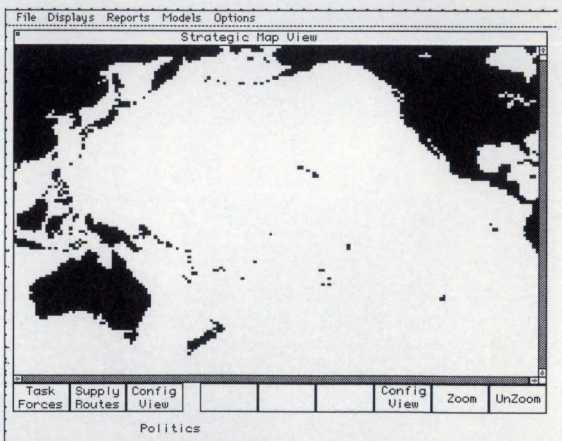
Over 95% of the needed algorithms are done. Some of the key ones have been tested and proofed using a 'monte carlo system' I've developed. However, it requires a bit of coding and screwing around to get them into a format where the monte carlo testing will work. You know what monte carlo is? If not, it's a model that tests an algorithm or, more often in my case, a series of algorithms over thousands of iterations and gives a reliable picture of what the system will do over many iterations.

Artificial Intelligence

The keys to realistic combat AI are hidden information and randomness. If you have that, you can employ quite simple routines. As Clauswitz and Sun Tzu point out, even simple plans are difficult to execute in combat.

The Artificial Intelligence data is presented in narrative form with the probabilities imbedded in the description of the routines. I'm still having some problem with the strategic AI, but nothing that a little more application won't solve. ❑

STRATEGIC MAP VIEW



All orders for strategic map should be available attached to the map view.

Implementation Sequence
Strategic Display
Unit List
Strategic Movement
Tactical Display
Tactical Movement and Combat
Strategic Combat
Strategic AI
Tactical AI
Leadership
Other

Program Sequence
Load main executable
Player chooses scenario option
Program initializes scenario and begins play
Player input
Change production
Reroute supply
Movement orders

Computer Procedures
Strategic Search
Tactical Search
Strategic Move
Tactical Move
Strategic (aggregated) Combat
Tactical (detailed) Combat
Logistics
Strategy Selection
Tactics Selection

Resolution
One day Strategic
One Hour Operational
30 Sec tactical

Victory at Sea will be published by Three Sixty Pacific in 1993

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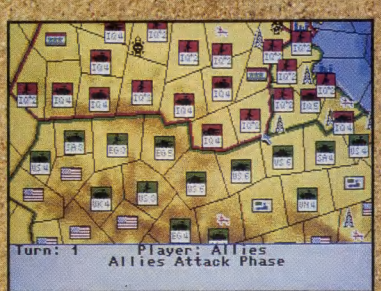
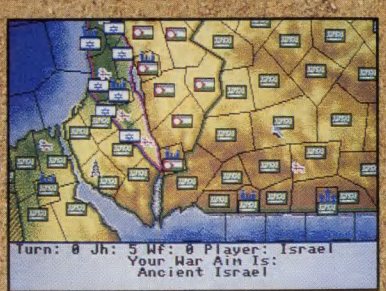


A historical scenario showing Coalition Forces preparing to invade Iraq and liberate Kuwait



The diplomatic situation in the hypothetical "Holy War" scenario.

SCREEN DISPLAYS: IBM 16-color VGA.

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STRATEGIC SIMULATIONS, INC.

NEW WORLD ORDER

Design notes by Tim Sammons

In the 1990's as Desert Shield turned to Desert Storm, the 41st President of the United States, George Herbert Bush, announced a New World Order. His call for *perestroika* on a global scale echoed eerily similar words uttered more than half a century ago in a different language by a once obscure Austrian painter.

In the 1930's, ex-corporal of the army, Chancellor, then President of Germany and finally Fuhrer of the thousand year Reich, Adolph Schickelgruber, alias Hitler, proclaimed his Nazi vision of the New World Order. We all know the cost in lives and suffering that Hitler's New World Order wrought on humanity. What is seldom emphasized and less well understood, is the degree to which all the great leaders of World War II sought to remake the world to fit their conflicting images of the past and the future.

Stalin wasn't stalling

Churchill struggled to retain the British Empire and to reestablish the millennial *Pax Britannica* in the face of a 'lost' war and the inevitability of anti-colonial nationalism.

Roosevelt envisaged a democratic, capitalist world, peacefully integrated into a global community of prosperous peoples, embracing the free market and free trade under the dual aegis of the United Nations and American economic power.

Stalin stopped at nothing to secure the geopolitical goals inherited from the Tsars and to ensure the dominance of the Communist Party, both as protector of the 'New Socialist Man' and as the primary instrument of his own power.

Tojo with his declaration of a 'New Order in Asia' and his conquest of the 'Greater East Asian Co-Prosperity Sphere', intended to extend the greater glory of the Chrysanthemum Throne and the Emperor-God; not to mention, feed the factories and line the pockets of the 'Zaibatsu' industrialists.

Against this panoply of warring visions, the world bled and burned for most of six years. Out of the carnage at incredible cost, a New World Order, the shape of which no one could have predicted, was indeed born.

Sometimes the making of Machiavelli Designs Inc's new game, **New World Order**, feels a little too much like trying to fight WWII all over again: Tough, agonizing decisions about what to build in and what to sacrifice to the constraining gods of time, money and computer science. Bright, strong-willed people battled through seemingly interminable discussions/fights/ over the textures and colors for maps; the shapes and sizes of icons; statistical models and decision heuristics; and the host of other minutiae that go into making a complex simulation.

On a role

New World Order (NWO) is a multi-player, global simulation of WWII (1939-1945+) from the perspective of the five great war leaders: Germany's Hitler, Britain's Churchill, the US's Roosevelt, Japan's Tojo and the USSR's Stalin. Each player chooses a role and the computer simulates the activities of the remaining leaders.

NWO makes it easy to create one's own New World Order. All the player has to do is: raise the money; research, develop and produce the weapons; build and maintain the infrastructure (roads/rails/etc.); obtain raw materials or synthesize substitutes; grow food and feed the people; draft soldiers and build an army; keep the domestic opposition happy or at least quiet; win elections and avoid coups; select generals and advisors; define theatres of operation and keep them supplied; define objectives and develop military strategies; manage diplomacy to neutralize enemies and acquire allies. This could have turned into another unplayable monster game, but the flexibility of the design encourages play at a level and detail of play that feel 'right'.

Knocking socks

Extending the limits of what is possible on today's microcomputers, our artists and programmers have developed maps that will, I think it is safe to say, knock socks off. Our graphics interface allows the toggling of terrain, weather, supply status, political/military influence, geographical features, country boundaries, cities and capitals, place names, resources, unit icons and other identifiers. Military equipment buffs will find all major weapons systems detailed by class and model. Using the special weapons subsystem, the player can develop all the same advanced weapons actually used during the war, as well as research some plausible super weapons possibilities.

The limited reserves of personal and staff energy must be husbanded and expended wisely. As their energy and morale decline, staff will perform less and less reliably and take longer and longer to complete assigned tasks. Military and domestic morale are as critical as one would expect with battle results, bomb damage, propaganda, sabotage and partisans etc..., all playing a role in increasing the war weariness of the people. If personal energy falls too low, available options will be limited and one's leader may get sick or even die.

Hearts and minds

NWO has two hearts, seen unseen. The visible heart of the game is the complex integration of detailed statistical and historical models of national and global economic, social, political and military systems. The hidden heart is the interweave of AI engines that drive the computer players to heights of deviousness and ingenuity. After starting the program, the player will be asked to select a scenario

and game turn length - from six months to two weeks or, let the computer choose a scenario of the appropriate length.

NWO's game turns are played in four main phases: an Economic Planning Session, a Staff Meeting, a Military Planning Session and an Action Phase. During the Economic Planning session, one can play at the top level by simply allocating resources to civilian or military production and the computer will make all the necessary micro-decisions regarding allocations to the various production subsystems. Alternatively one can micro-manage any combination of civilian economic factors. With Military Production, the player can be content with one overall allocation or dive into the details. What makes this approach work is that the computer handles intelligently all the 'little' decisions.

Tinker, tailor...

Staff meetings begin with a review of a personal agenda. Various domestic, special interest groups will request meetings. Since there won't be time or energy to see every politician, union boss, banker, preacher, businessman, etc..., who wants an audience, one will have to be very selective. In many cases these complainants and their problems will spontaneously go away or be solved by other government policies, however some problems and their spokespersons can only be ignored at one's peril.

The player can also request or accept summit conferences with other world leaders to cement alliances, negotiate treaties, sue for peace or seek other diplomatic advantages. This is time to request research studies and detailed analyses from the staff. The reliability of this information and in fact of almost all the information received during the game is dependent on the levels of many related factors: morale and staff energy; intelligence and covert operations; cryptology; and propaganda.

During the Military Planning Session, one can, among other things, define theatres of operation, appoint or replace military commanders, allocate force levels, choose a military posture, determine strategy, select invasion sites, and set strategic objectives for each theatre. Major victories or defeats or the completion of current theatre goals during the Action Phase will trigger emergency Military Planning Sessions.

In the Action Phase the player receives regular reports in the form of Naval Dispatches, Field Reports, Air Mission Debriefings, Intelligence Reports, and News Flashes and Bulletins, and Diplomatic Dispatches etc... When critical events occur, zoom in and examine the action more closely or take control and meddle with the commander's prerogatives.

History is funk

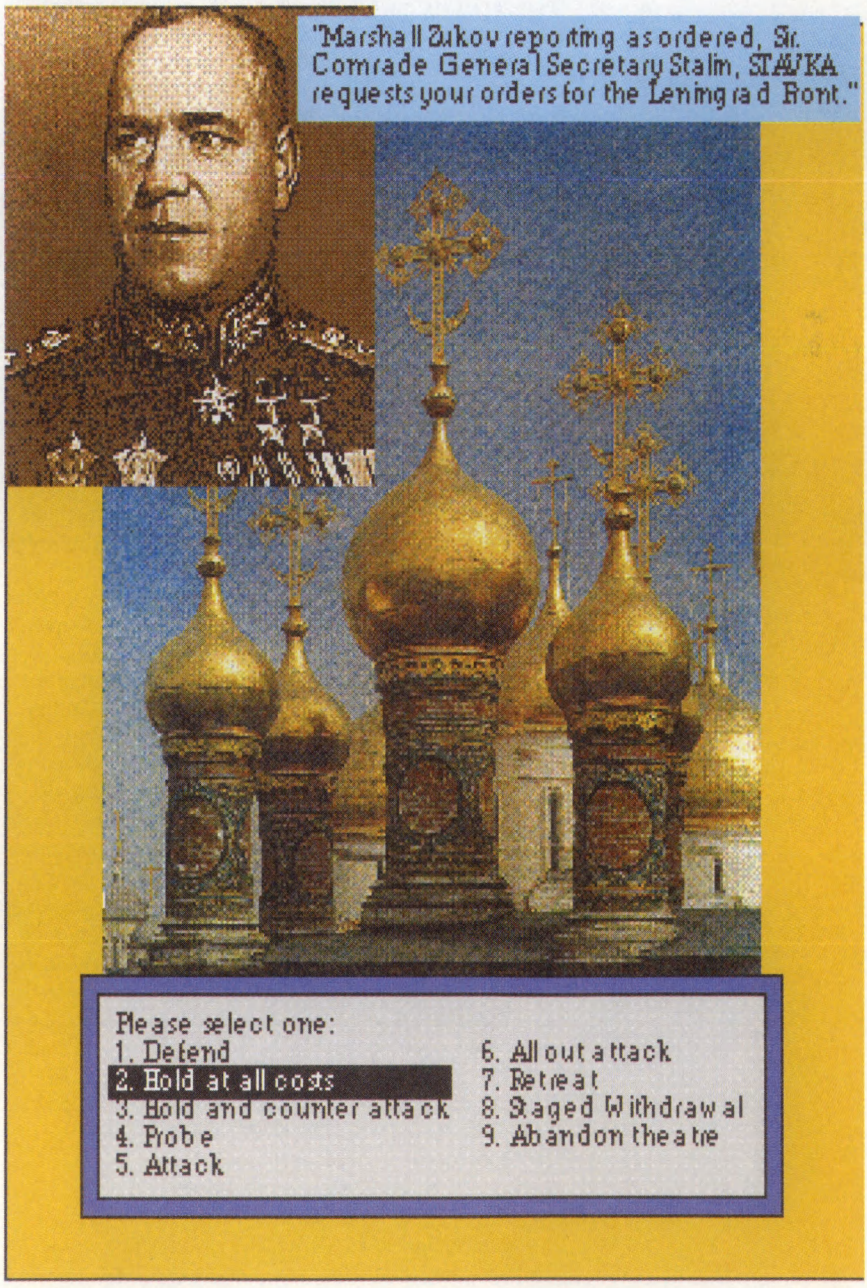
Victory conditions vary considerably by scenario. One easy way to balance play is to alter the victory conditions to handicap the more experienced player. If the 'playability' option is turned on, our AI engine will automatically adjust game difficulty to the level of each player's abilities.

In general, victory is attained by doing at least a little better than the historical leaders or by outperforming fellow human opponents. Remember, that unlike other computer games and many humans, **NWO**'s computer players will improve as the user get better. Consequently, one will have to play close to a 'best' game in order to have a good chance to win.

What if?

Some of the additional modules we are working on for 1993 include programs to allow the player to create their own military commanders, advisors, and diplomats; generate customized scenarios; and extend the game back to 1930 so that even more 'what if' options can be explored. And who knows, perhaps players can find out how the Old World Order could have shaped the present? ❑

New World Order *will be published this fall by Machiavelli Designs Inc for the PC and will support Super VGA and VGA. Other formats will follow.*


"Marshall Zukov reporting as ordered, Sir. Comrade General Secretary Stalin, STAVKA requests your orders for the Leningrad Front."
Please select one:
1. Defend
2. Hold at all costs
3. Hold and counter attack
4. Probe
5. Attack
6. All out attack
7. Retreat
8. Staged Withdrawal
9. Abandon theatre

PATRIOT

Design notes by Rick Banks

When Three-Sixty president Tom Frisina first met with the Patriot design team, he presented us with what sounded like a straight forward mandate: create a land-based version of **Harpoon**. This is, of course, Three-Sixty's very popular naval warfare simulator. We spent the better part of our first few meetings trying to figure out exactly what 'land-based version of **Harpoon**' meant. To be sure, high quality, extraordinary technical accuracy, and in-depth state-of the-art features and interface were crucial elements. But naval warfare and ground warfare are very different. We could not just transfer **Harpoon** to a land-based format. Thus, **Patriot** became more than a ground war game based on Desert Storm - it has become a new, dare we say, a revolutionary, gaming system. A gaming system with new kinds of maps, new ways of issuing orders, new ways of displaying status, new depths in detail and magnitude, and so much information that it takes Super VGA to get it all on screen.

Hail bloody Mary!

Patriot's first battle set encompasses the Gulf War theatre. The player can select from several preplanned scenarios, including Schwartzkopf's Hail Mary plan, or they can design their own. The preplanned scenarios provided are viable and interesting alternatives, ranging from full-scale scenarios to smaller battles.

You might wonder, as we did, how the Gulf War could be turned into a balanced game. We think we've found the answer, or rather two different answers. First, assuming players chose to play the straight historical campaign scenario, the object of the game is to achieve the coalition's objectives as efficiently and with the fewest casualties possible. The fact that the coalition victory looked easy is largely because the commanders did an outstanding job. Players will have to work very hard to do as well.

Beyond the historic campaign scenario, however, the player has considerable latitude to explore some interesting options that raise the level of difficulty. The most basic of these is an earlier start option. Players can increase the level of difficulty by allocating fewer days of bombing in preparation for the ground offensive. On a more sophisticated level, the basic proficiency of Iraqi troop units can be edited. The coalition had a big edge in training and soldier skills; the program's edit function allows the player to eliminate that edge and examine what could have happened if the Iraqi forces had been properly trained.

Taking flight

Game design is an iterative process. It is difficult to pinpoint what led to what, but many of the features in the **Patriot** system evolved from asking hard questions regarding the use of maps and the associated interface. There are no hexes in **Patriot**'s maps. Dividing the world into regular size chunks has been a convention of convenience in board and computer war games for years. But computers are more powerful than ever and such compromises are no longer necessary. The maps in **Patriot** are, well, realistic.

The surface of the world is divided into terrain types (yes there are different terrains in a desert). The terrain is represented by thousands of polygons (many-sided objects more commonly associated with flight simulators). On top of the terrain are placed objects that a military commander would consider significant. Players can zoom in and out and scroll around the maps, always finding more detail. Because of all the detail, it is easy to get lost, so like real maps; the game provides features that locate the area a player is examining on a full scale map. **Patriot**'s maps look like the real thing because they are the real thing.

Maps created and used in this way have a significant impact on the entire simulation. Units can be located anywhere and can move in any direction. The time required for a unit to move can be accurately and realistically calculated. Forces can be focused in specific areas and physically arranged in a realistic manner.

Desert org

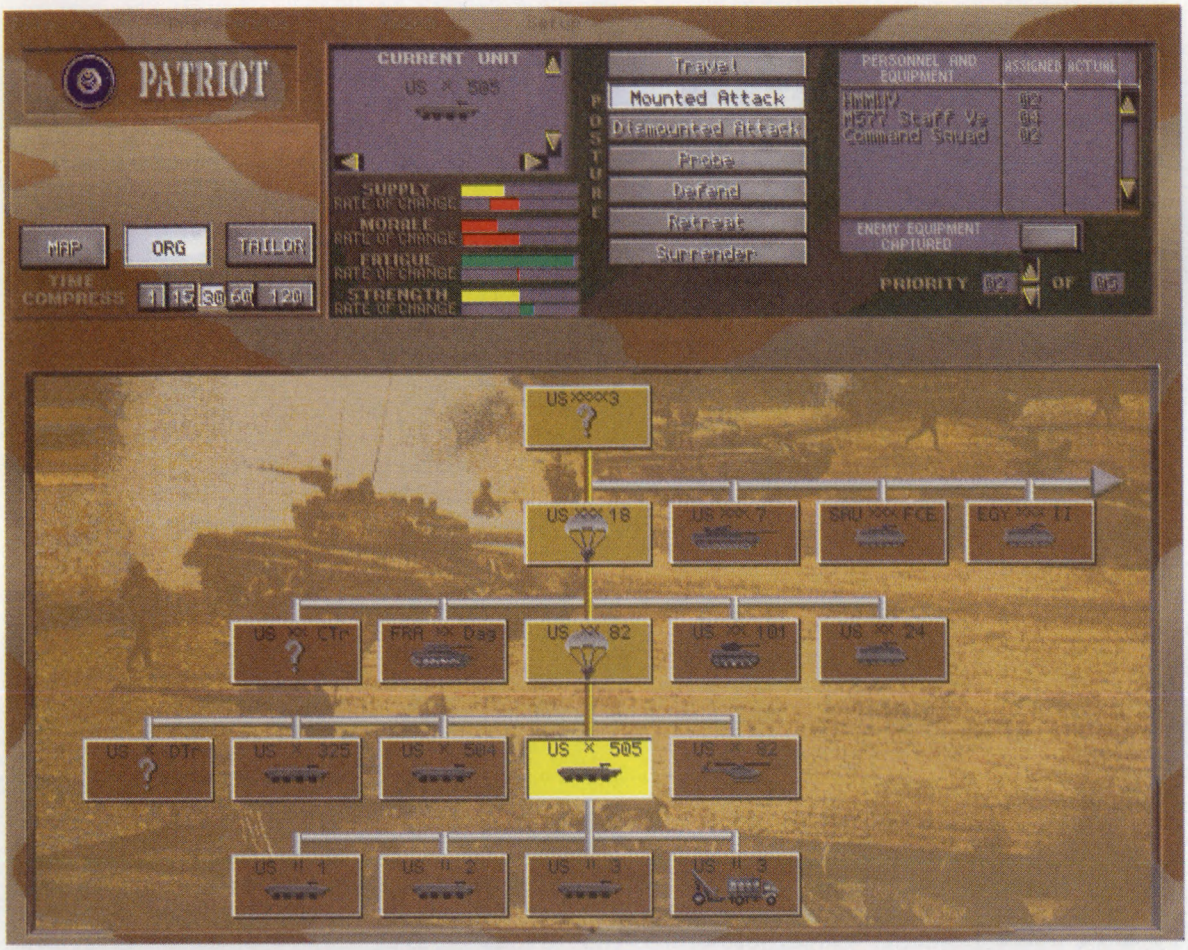
Another significant question often asked during design was what level of command will the player take? Failure to answer this question led to a game system that allows the player to command at any or all levels. **Patriot** contains a complete and accurate organizational chart for both sides. The player can examine the structure of his entire army at any time by examining the chart.

The organization chart (org chart for short) is extremely realistic. Standard NATO symbols are used, although alternate symbols and even text are available The structure is drawn using the standard org chart method, and simple controls are provided, so that a player can quickly see for any unit; its commanding unit, its immediate subordinate units, and its parallel units. When you're trying to deal with thousands of units (and **Patriot** does distinguish between line, reserve, and support units), you need this kind of system.

At all times during the game the player has a current unit for which relevant information is supplied: strength, morale, fatigue, supply, equipment, posture, enemy equipment captured or destroyed, and priority. The player can switch from the org chart to the map and see exactly where the unit is located and its position relative to commanding and subordinate units. The map automatically zooms in or out to the required level. Thus, between the map and the org chart, the player can obtain all the information about a unit that any real commanding officer might have.

Relics in cardboard

The most fundamental difference between **Patriot** and most wargames is the sort of control players have over their units. In most games, players select a unit and tell it which map cells, hexagonal or otherwise, that it will move through. Usually it will attack anything encountered along the way, or in simpler games, it will stop when it encounters an enemy unit and then wait for an abstract combat



phase in which attacks are resolved. Most of these mechanics are relics of board wargames which use map cells to regulate position, units are picked up one by one and moved. These gaming conventions have absolutely nothing to do with how a commander controls units on a battlefield.

In the order's phase, a commander specifies the following things about a unit:-

- Its subordination: players can move battalions from one brigade to another, brigades from division to division, and divisions from corps to corps. With the editing function, the player can even swap companies between battalions.
- Its role: players can determine whether the unit is deployed on line, behind the lines as a reserve, or in front of the main line as a covering force.
- Its objectives: where the unit is supposed to go, usually including both an initial and a final objective.
- Its boundaries: the player specifies the right and left flank delineation between its territory and that of its neighboring units, from the front line all the way to its objective; in other words, its area of operations.
- Its posture: defend, delay, probe, dismounted attack, mounted attack, and so on.

l Its priority of support: each subordinate unit is ranked in descending priority order within its parent unit, from battalions in a brigade all the way up to corps in an army. This determines how much supply the unit receives, what proportion of artillery and aviation support it gets, and what proportion of the command assets are dedicated to the unit.

Company structure

Orders given to a unit are automatically disseminated to all of its subordinates, and in the case of boundary lines and priorities, have an effect on any parallel unit. Thus, a player can sit and watch a plan unfold. Or a player can issue orders where required. Direct the corps, or if a corps is in trouble, issue commands to its division. If players so choose, they can give orders to every single battalion. Might take a while, but it can be done.

The lowest unit that can be commanded is a battalion; the player is free to study its structure by examining the nature of the individual companies, including their personnel and equipment. Statistics and pictures of over 350 pieces of equipment can be called up. And if all that's not enough, more than 20 attributes that are used by the battle resolution algorithms for each piece of equipment may be investigated and edited. This means that the player can alter the actual attributes of weapons systems and equipment - weapon performance can be changed based on, for example, what was expected instead of actual performance. The edit function also means that hypothetical performances can be modelled making **Patriot**, literally, the game of the future. ❑

***Patriot** will be published by Three Sixty Pacific in the future (late September as a matter of fact)*

CARRIER STRIKE

Strategy and tactics by David Bolton

To win at **Carrier Strike**, one needs a complete understanding of all the mechanisms involved in preparing and sending aircraft on missions. The game is won or lost through the use of carriers and their aircraft. Other ships are unimportant -- it is the carriers which count and which must be preserved at all costs. In all carrier games (board or computer), the most vital tactic of all is just four words long: find the enemy first.

The actual mechanism of aircraft control is poorly explained in the manual though the tutorial compensates a little. When aircraft are up on deck, fueled and optionally armed (Combat Air Patrol and Search aircraft don't need to be armed) they are sent off in one or more flights. There are three types of flights: Search, CAP (Combat Air Patrol) and Air Strikes. CAP is when the aircraft defend the task force or other task forces.

Before attacking the enemy with an Air Strike, the enemy must be found. To search a full 360 degrees around a task force needs 36 aircraft (each covers an arc of 10 degrees). It's unusual to need a full 360 degree cover as the enemy's general direction is known in advance -- the Japanese come from the West. A more realistic number of aircraft is 12 covering 120 degrees, and two carriers can provide a very effective pattern. In most scenarios where task forces are near airfields (Midway, Solomons), the numbers can be reduced further as the island air forces (Catalinas and Hudsons) have a longer range.

Searches

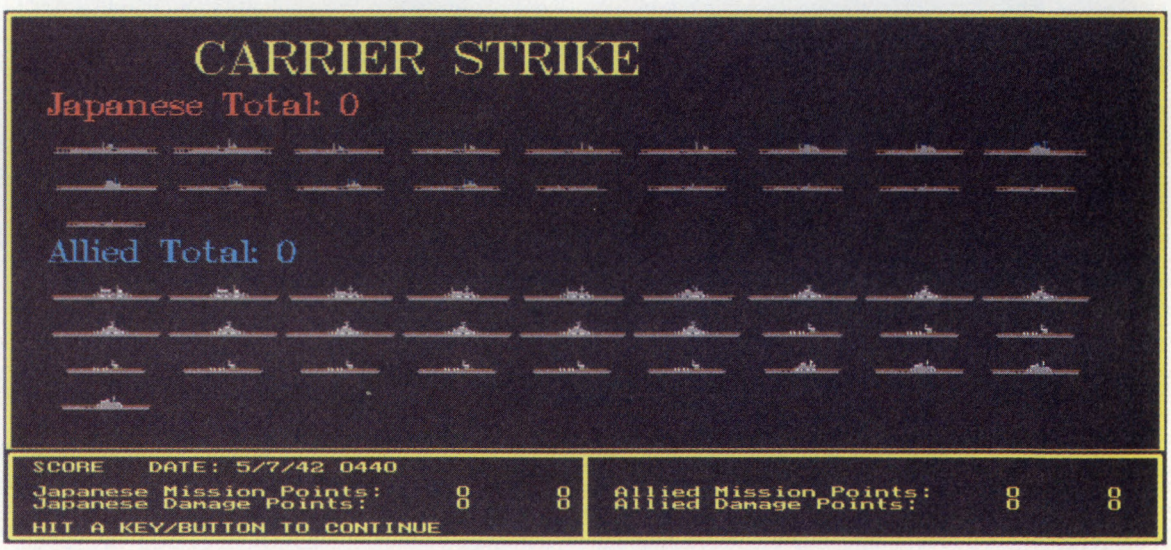
Another point to watch with ship-based searches: keep some aircraft in reserve for searching. Searches are done as a series of concentric circles starting at the carrier. After ten turns, the circles start contracting and the reserve aircraft should be already on their way to ensure continuous cover as far out as possible. Ten turns is just over three hours at twenty minutes per turn.

All the aircraft types except fighters can be used for searching, CAP and Air Strikes. There's nothing to stop fighters searching, but it's not their best role. In one Midway game, all three US carriers (Enterprise, Yorktown and Hornet) were lost due to lack of CAP cover, as half the fighters were out searching. A silly mistake but easily done. It's better to use unarmed bomber or fighter bomber aircraft; individual aircraft can locate the target but won't attack it. There is a bit of a dilemma in the use of fighters. They are intended for both bomber escort duty and carrier defence (CAP). If the fighters are kept back, then the bombers fly without escorts to the target and suffer more losses due to enemy CAP. But if the fighters provide escort, then the home carrier's CAP suffers, and that may prove fatal. One way out of this is to keep two or more carriers together in the same location or task force and use some fighter groups for CAP, others for escort.

Larger numbers of aircraft in fewer attacks do more damage than a larger number of smaller attacks. The game allows a strike to be prepared over two turns, with up to 150 aircraft sent from different carriers in one attack. Each attack is chewed up by the opposing CAP and flak, so one attack of 150 aircraft will lose fewer aircraft than three attacks of 50.

If this sounds a bit contrived, it is not. During WWII, British mathematicians found that increasing the number of ships in convoys actually decreased losses due to Uboat activity. When the attacks go in, the results are very random and only seem to score carrier hits on roughly one in eight. Although carriers are the main target, escort ships will often get attacked instead.

Fifty or sixty bombers with 500lb or 250Kg bombs or torpedoes will nearly always sink an aircraft carrier and inflict very severe damage on two carriers. It's harder for the Japanese in this respect. They are forced to do larger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Japanese Total: 0
Allied Total: 0
SCORE DATE: 5/7/42 0440
Japanese Mission Points: 0 0
Japanese Damage Points: 0 0
HIT A KEY/BUTTON TO CONTINUE
Allied Mission Points: 0 0
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Carrier Strike is designed by Gary Grigsby and published by SSI. UK distribution through US Gold

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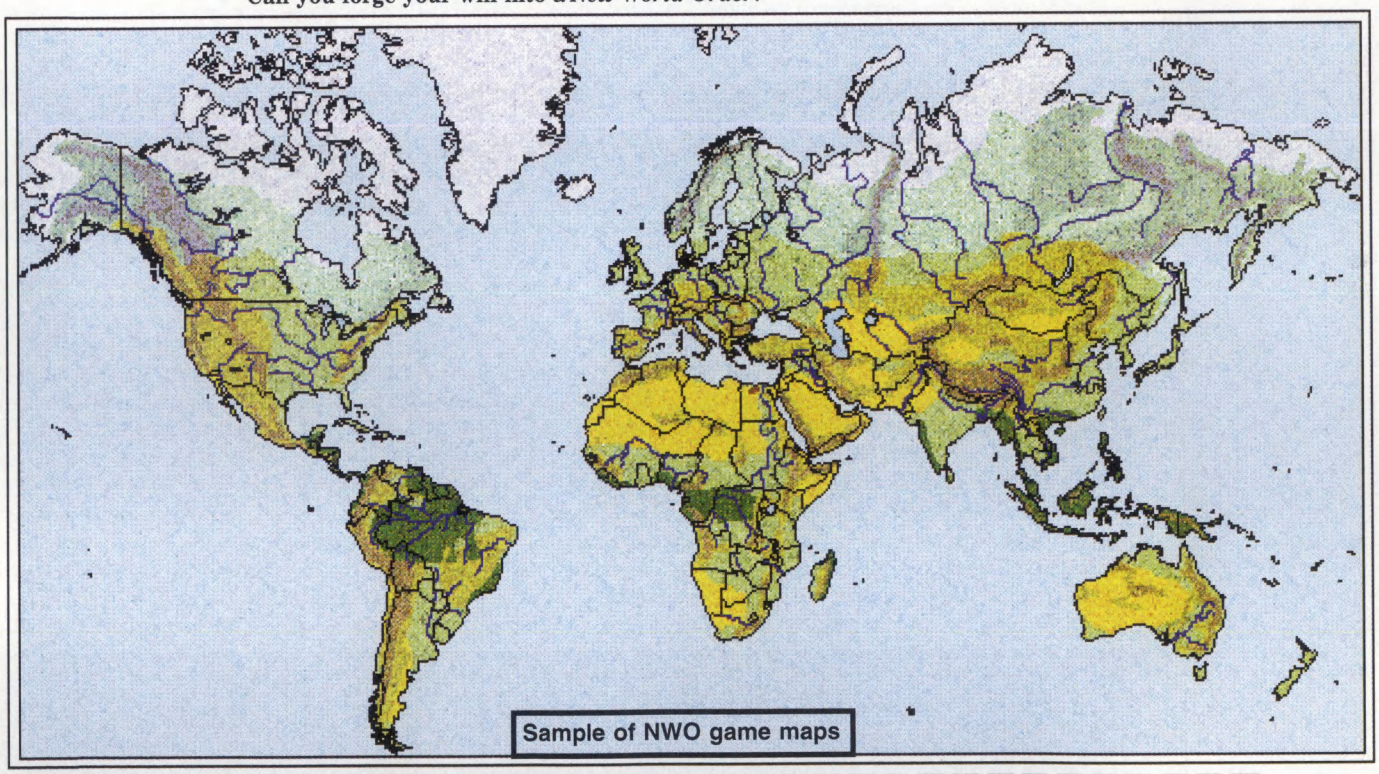

Sample of NWO game maps

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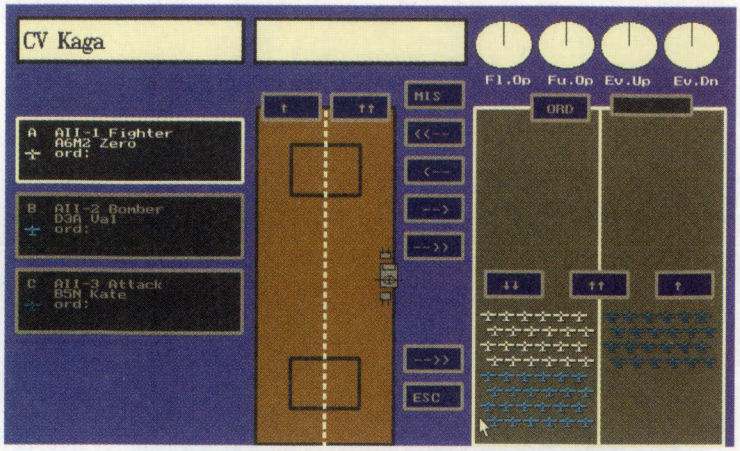

attacks as US flak starts off with a value of 1.1 (against the Japanese 0.75) and increases to 1.25 from 1943 onwards. Surface combat task forces can be used to divert enemy aircraft, but taking them too close to enemy ships is a bit risky unless they are superior.

The campaign

The Pacific was a gamble for the Japanese and one that they lost from the start as they failed to cripple the US carrier fleet when they attacked Pearl Harbor. The fleet was elsewhere at the time. The Battle of Midway was another attempt to destroy the American fleet; the island itself was relatively unimportant except for its proximity (1100 miles) to Hawaii. The Japanese correctly judged that an attack against Midway would draw the inferior US fleet out and offered a chance of destroying it.

The scenarios reflect the changing strengths as they favor the Japanese at the start; but at the end, the Japanese player has a very tough job defending against the US.

In the campaign game, the Japanese player must destroy US carriers as fast as possible. This isn't helped by the lack of Japanese radar at the start. The US gains an edge by the extra reinforcements, but during 42 it only has six carriers against the ten Japanese. If these carriers can be sunk, the Japanese player will have an easier job later on. One small advantage that the Japanese player has is that the prevailing wind seems to be with him. As carriers have to be facing the correct direction for aircraft to take off, this is less of a diversion for the Japanese ships than the US. Much time was lost redirecting US carriers after aircraft have taken off or landed. Automatic computer control of task forces can be enabled but this is somewhat inflexible. Sayonara and happy hunting!

The Scenarios

Coral Sea

The Japanese were attempting to capture Port Moresby. The first encounter is often made by the US forces with a small diversionary force lead by a Japanese light carrier. This attempts to draw the US Carriers away from the larger Japanese air force. If they follow the light carrier, the Japanese get in and score points.

Midway

The Japanese gain points by attacking the airfield or damaging the carriers. For the US, this is quite a tricky scenario (especially if randomized). They won the real battle by luckily hitting the Japanese carriers during rearming of their aircraft. It is difficult to catch the computer Japanese player in the same mistake! It is considered that Yamamoto made a bad tactical mistake by sending the carriers ahead of the bigger ships. This 'mistake' is kept in the game.

Eastern Solomons

A Japanese landing force, supported by three carriers and a significant number of other ships, is trying to land an invasion force at Guadalcanal while opposed by two US carriers with a third coming up rapidly. The Japanese have a slight edge as this was in 42, but it's so close that skill with carriers will be decisive. The later scenarios, Santa Cruz, Torokina, and Marianas shift the emphasis from Japanese attack to defence against the increasingly stronger US forces. This culminates in the massive battle in the Marianas between fifteen US carriers and nine Japanese. ❑

Carrier Strike Expansion Disk

SSI plan to release an expansion disk for Carrier Strike, probably in mid-September. This will contain five 'what if' scenarios.

Plan Orange: Pearl Harbor never took place and the America Fleet took on Japan immediately.

Wake Island: the Japanese Fleet were intercepted immediately after the Pearl Harbor attack

Coral Sea: all the US carriers were destroyed in the Pearl Harbor attack, but new ships arrived from across the Atlantic to do battle.

Guadalcanal scenarios (2): one assumes that there was no Battle of Midway, while the other has the Japanese digging in and defending Guadalcanal with everything they've got.

All of these can be played as individual scenarios or fed into the campaign game which commences in 1947. This takes the view that Japan and the US stayed out of World War II so that all their forces are intact as the battle commences. This scenario will also include some ships that were planned but never actually built; the Montana class battleships would have been the biggest at sea had they been constructed. There will also be 'super carriers', capable of flying larger numbers of planes and night fighters. New weaponry will include air-to-surface missiles and 4000lb bombs.

With this scenario disk, SSI plan to include a 1.1 upgrade to the program to fix some reported bugs. This will also be available separately. The scenario disk, priced at $29.95 will only be available from SSI. European readers should contact US Gold for information about availability.

Brian Walker

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Siege

Catapulting to fame

by Mike Woodhouse

Published by
Mindcraft

Designed by
Ali Atabek, Larry Froistad, Patrick E Hughes, James B Thomas

Systems
PC

Graphics
256-color VGA graphics

Supports
Mouse keyboard Soundblaster or compatible (memory over 1 meg used for digitized sound effects)

Slowly, the computer wargame is acquiring its own identity. The idea of implementing miniature or hex wargames on a computer has little merit other than to provide an opponent for an otherwise isolated gamer. Designers are now beginning to look at the unique advantages offered by the powerful micros available today and are starting to come up with software that makes use of them. But we are not *quite* there yet.

Castle interplay

As its name suggests, **Siege** is about the taking of castles. There are four castles, each having about six scenarios. A tutorial scenario, involving limited units on each side, is provided. The forces of light and darkness compete for possession. The player has the option of being defender or attacker and may choose from a broad selection of races.

The breadth of racial characteristics in a fantasy setting allows a variety of troop abilities across each army. Troops are divided into three main types: melee, missile and engineers. Units may be created from any available troops of a given type, up to fifty individuals per unit. Once a unit is created, it can be given a number of orders; for example, 'return to barracks,' allows R&R as well as redeployment of personnel.

On the boil

The foot soldiers are the work-horses of the army. Once told to go somewhere and do something, they get on with it without much intervention being required. There is an Auto option, which permits the computer (in the role of *aide-de-camp*) to jump in if the situation gets serious. This is handy in the larger scenarios where well over a thousand troops may be involved; plus, when such groups are getting a right old hammering, they can be told to return to barracks for a spot of first-aid.

Engineers are crucial to the success of either side. They are the means of bridging moats and erecting ladders and siege towers. They wield a mean battering ram as well, when such an implement is available. Engineers also operate catapults, ballistae and boiling oil, all of which can cause havoc in the opposition's ranks if well-directed (ie on their heads). There never seem to be quite enough engineers, so they have to be well-managed and protected at all times.

A degree of care needs to be taken in ordering engineers to do their stuff: for bridges, the water area itself needs to be selected; whilst for ladders and siege towers the area at the foot of the wall concerned, not the wall itself, should be chosen.

The battle is presented from a birds-eye view, at three levels of magnification. The complete map is useful for identifying concentrations of troops, while the intermediate level works well for group selection and general orders. The most detailed view shows individual units and can be used for fine-tuning. Without a fair degree of familiarity with the aerial view, it is quite difficult to tell what is what, so the ability to double-click on anything and be told what it is comes in handy, particularly at the start.

Ritual dance

The manual I received was pre-production, but looks seems comprehensive. All units and their operation are described in detail with a nice low-key humor showing through occasionally. I assume that winning requires the complete annihilation of the opposition since that was one of the sections not provided. I did on one occasion manage to kill every defender I could find, but no congratulatory screen appeared to praise my superlative efforts. To make up for this, I awarded myself a conclusive victory and performed a ritual dance around the house -- much to the astonishment of the neighbors.

While the graphics are attractive and the sound effects appropriate, I was not hugely impressed with the computer's standard of play. Too many times I was able to pick out a small group of enemy troops and destroy them in detail while a few yards away a fresh bunch leaned on their swords and watched. As usual the computer is much smarter on defense than attack.

Siege is a long and fairly complex game. The tutorial alone took me a couple of hours, and the full scenarios range anywhere from five to ten hours, although there are a lot of pauses for evaluation. Neither is it the sort of game where defeat is obvious at an early stage. All in all, though, **Siege** is a well put together game on a refreshingly different subject. ❑

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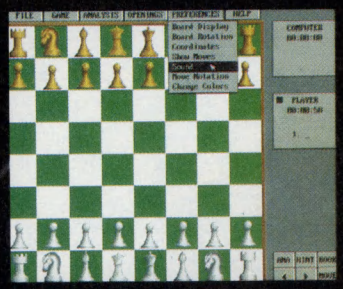

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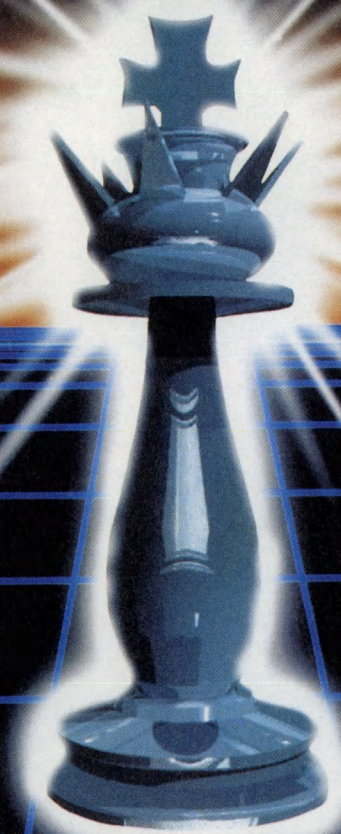

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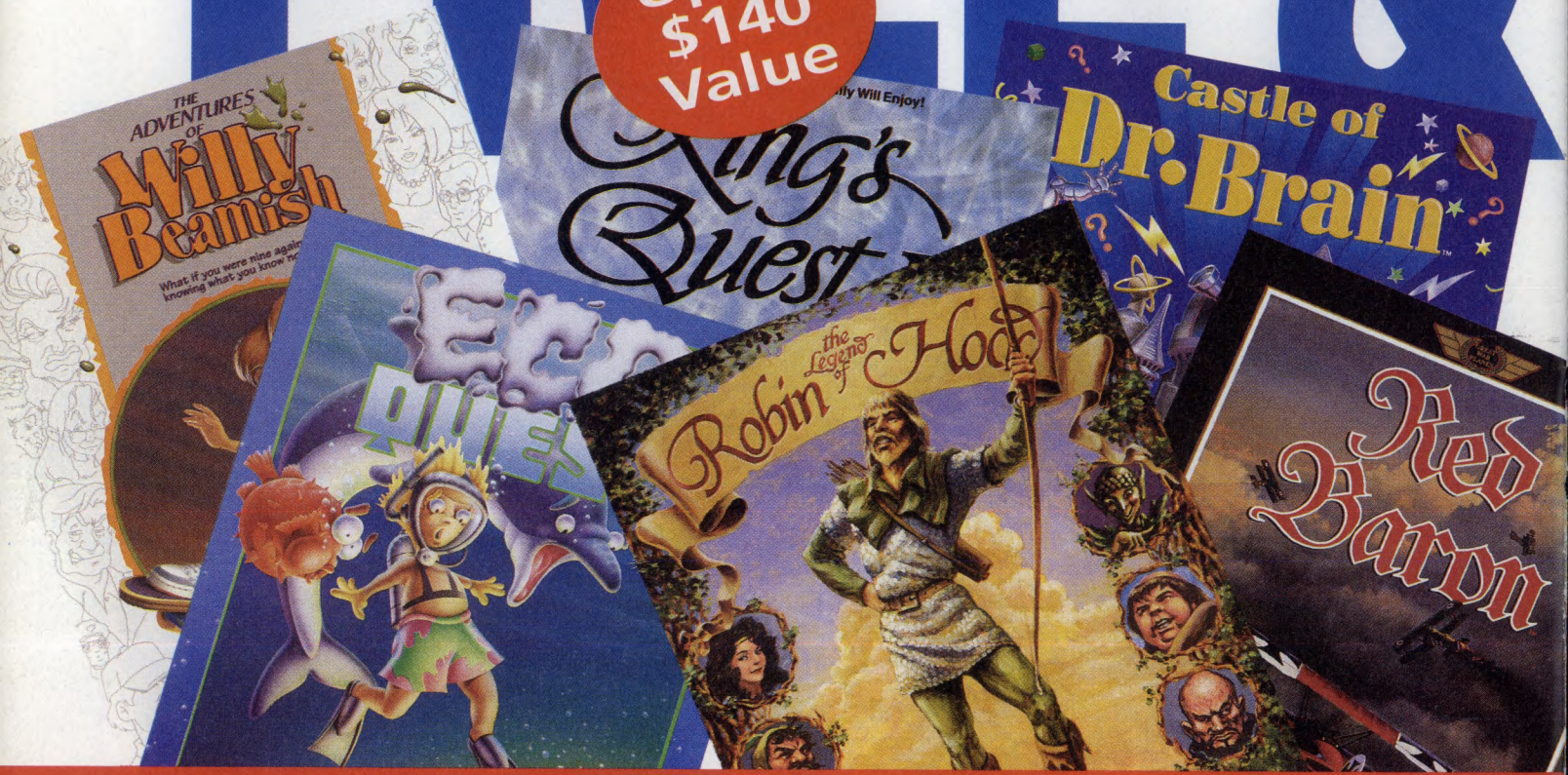

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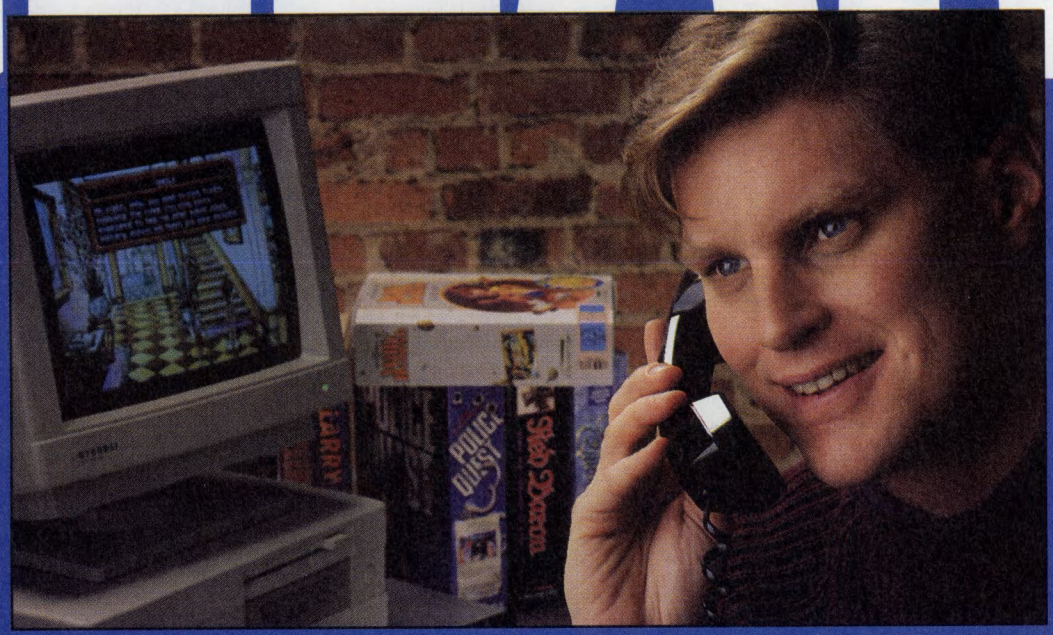

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Ragnarok

Norse Code

By Steven Wartofsky

From out the northern reaches of the great state of California (Redding) comes **Ragnarok**, a CRPG developed around the central elements of Norse mythology. The time is definitely pre-Wagner, pre-*Götterdämmerung*, and Yggdrasill, the Tree of Life, is still standing. Organized beneath its leafy verdure is an utterly massive world.

Something like 200 different races inhabit the various planes of Yggdrasill, some friends, some foe. Some bite, some burn with acid, some teleport for fun, some are thieves, some are disease-ridden, some are poisonous to touch or look at or speak with. Some are solitary opponents, while others, like the Yapok, summon compatriots when the blood's up. The races are all grouped appropriately within the different planes they inhabit; their skills all derive from the nature of the reality they're subject to.

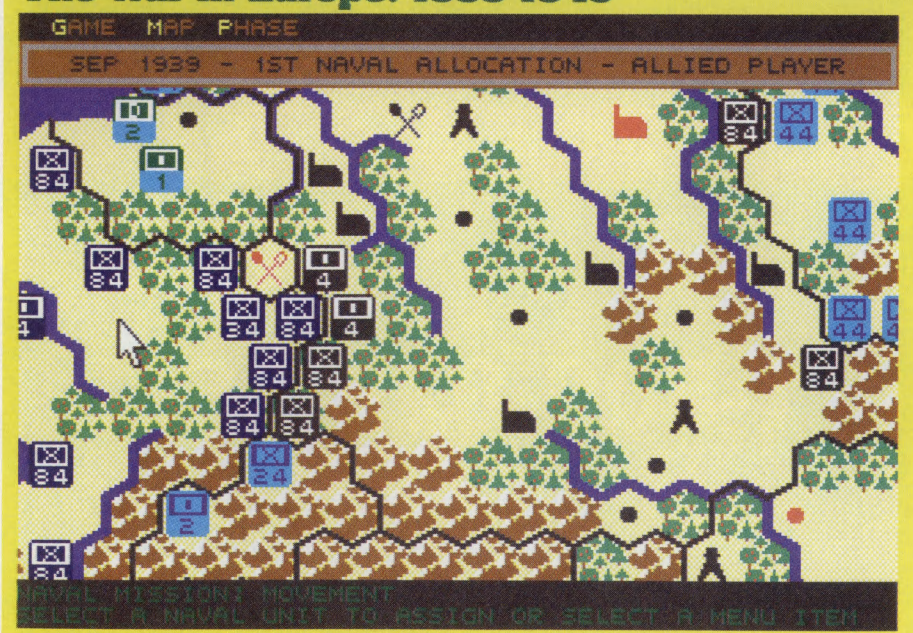
As the strategy book accompanying the review copy of **Ragnarok** makes quite clear, virtually all of these two hundred races require separate and distinct strategies. So one aspect of gameplay involves charting and documenting the successful means of defeating various opponents. The player confronts these races as one of six classes of human: Viking, Alchemist, Sage, Woodsman, Conjurer or Blacksmith.

Over time, a particular class can be mastered and surpassed by movement into another class; classes have over 30 levels apiece to come to terms with. Each class has skills appropriate to its role in the gameworld, and the different strengths and weaknesses require radically different approaches for success. For instance, Alchemists must work with their abilities to learn and develop potions, whereas Sages find their opportunities in the creation of and discovery of various scrolls of knowledge. Players can move back and forth between classes as appropriate to the unfolding situation, to make best use of the strengths of a particular class.

Ragnarok is replete with potions, scrolls, amulets, food items, wands, rings, tools and of course weapons and armour. About twenty different kinds of each category have been thoroughly conceptualized in the design, so management of inventory is much more than a question of figuring out which particular item ups the player's numerical odds most.

HIGH COMMAND

The War in Europe: 1939-1945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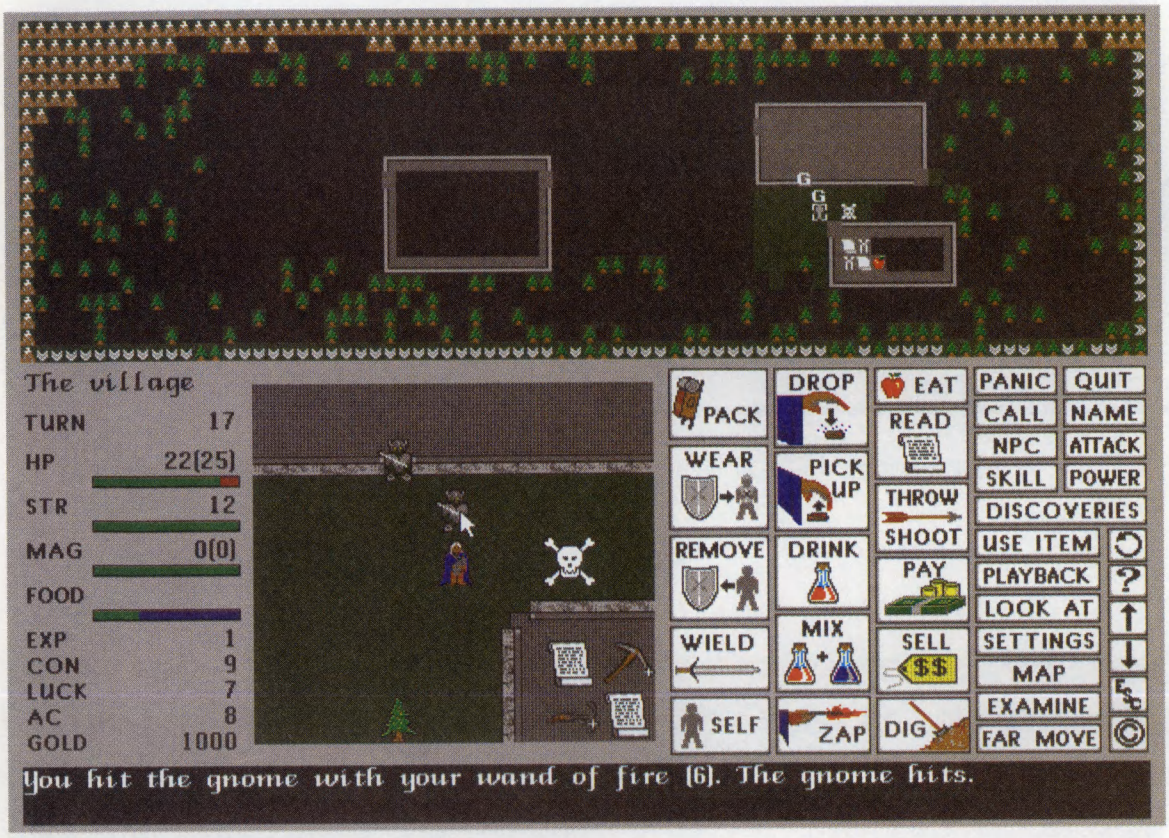


The central goals of the game are various. It's 999 AD and the player must act quickly before the coming of Surtr and his fire demons to save the Norse world. This involves a series of quests, to find news of Mimming, Mjollnir or Gungnir; to discover Mimer's Well and learn the skills and magic necessary to defeat Aspenth; to find some means to assist Tyr the One-Armed; and finally, to bring the necessary information about Thokk to Hela, in order to exchange it for the release of Balder's Soul.

The quests can be played separately or as part of a truly epic campaign, which involves reliving many of the detailed features of Norse mythology.

Finding a good book on same would be an excellent way to start this game; the more immersed in understanding about the mythology itself, the more enriching play will be, and the more likely the player will understand the kinds of choices that need to be made. It would literally require going into the intricacies of Norse mythology to fully describe the nature of **Ragnarok**, as it weaves itself deeply into the world of the Norse in order to construct its story.

One of the niftier features of **Ragnarok** is the player's 'polymorphing' ability: it's possible to transform into a monster of some sort, with special if temporary powers and abilities; however, transformations carry with them risks as well as rewards. Polymorphing might produce a few extra fingers, for instance, but if there are rings on the player's fingers prior to the transformation, some fingers might be cut off in the process instead.

All of this leaves the distinct impression that **Ragnarok** may become on the IBM what **Dungeon Master** was on the Atari ST, Apple IIGS, and Amiga; ie, a genre-defining game.

Pen-and-Paper role players in particular may finally find in **Ragnarok** a design which begins to prove serious enough to be competitive with the more sophisticated kinds of play previously possible only in paper form.

Without making any reference to the now-overused term 'simulation,' it can nevertheless be said that **Ragnarok** is truly unique as a CRPG, in that its reliance upon Norse mythology is systematic and, to this non-specialist's eyes at least, virtually complete. Unlike most CRPGs, which either feature half-conceived fantasies rudimentarily based upon some amateurish understanding of mythology.

All of which is not to say in the least that **Ragnarok** is too fulsome to be playable. On the contrary, the game leaves the first impression of being much like the classic dungeon crawl, **Rogue**, in its implementation. Which is to say that, like **Rogue**, exploration, movement and control are all so elegantly simple that playing soon becomes a rather addictive experience. The game has that rare 'just one more turn' quality that keeps the player involved even during the briefest of sessions.

It should be noted that the graphics accompanying **Ragnarok** are static, but beautifully drawn and appropriately meshed into gameplay, which takes place primarily via an overhead view of the map, strategy-style.

Players looking for some massive and passive multimedia extravaganza won't find that here, as all elements of the game design are very thoroughly conceived as part of the gaming experience itself. **Ragnarok** is not a game masquerading as a movie or a simulation; it's a game pure and simple, for lovers of same. Sound is implemented in similar minimalist yet appropriate (and careful) fashion.

Fans of role-playing games can rejoice in the discovery of something lovingly crafted here, designed to reward deep immersion in the mythology of the gameworld presented. Put on a helm and prepare to become lost in the cold mists of 10th-century Norseland. ❑

Designed by
Tom Boyd and Rob Vawter

Published by
Norsehelm Productions

Systems
IBM PC

Graphics
256-Color VGA Only
Amiga version to follow

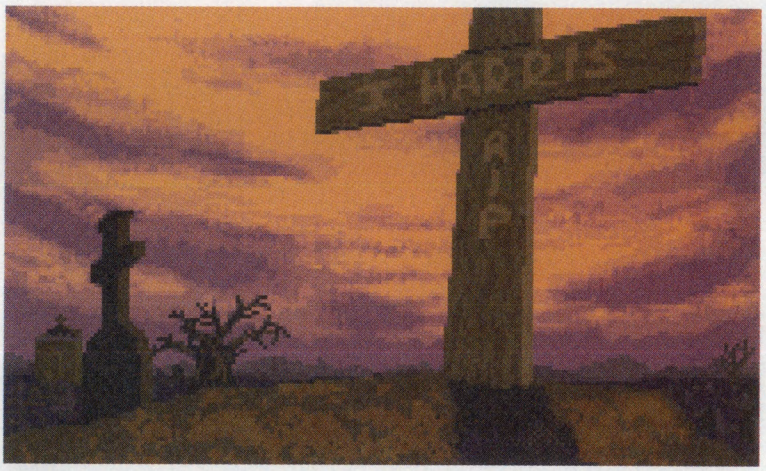
Supports
PC speaker

Notes
Hard Disk required;

PLAN 9 FROM OUTER SPACE

B-movie

by Steven Wartofsky



Published by
Gremlin Graphics (UK)
Konami (US)

Systems
IBM PC
Amiga

PC Graphics
VGA, EGA

Supports
Mouse, Keyboard, Sound Blaster, AdLib, Roland, PC Speaker

Notes
PC version requires over 8MB of hard disk space to install, takes up 6MB once installed.

There's a neat magazine out there, called *Re-Search*, which early on in its life featured an entire issue dedicated to 'B' movies. These are movies that never made it at the box office, that are low-budget productions, and that have sometimes developed cult followings. Their appeal is partly camp, but also due to the sometimes unique reflection of the world they exist in, a world fluttering intermittently at the edges of the mainstream. Such marginal experiences are the stuff of *Re-Search's* theme issues (a recent one on *Angry Women* is a major classic).

Belle Lugosi!

Plan 9 From Outer Space (the game, not the movie — relax, you're still reading *Strategy Plus*) makes hay more out of the 'B' movie environment than it does of the plot of the film. In the game, a sleazy film director needs to get all the reels of the film back and the player's the lucky culprit responsible for finding them. This involves a long journey through an underworld-ish environment full of thugs and strange people, operating with a traditional adventure-style interface. Though it's focused on the movie production environment, it nevertheless cleverly meshes that environment with elements from the most spectacularly failed movie in movie history, in the process turning a sow's ear into some slinky celluloid.

Screen machine

Plan 9 From Outer Space is an adventure without a player character that walks around inside the gameworld; it operates in a first-person perspective, via a series of static screens, which take up 2/3rds of the computer screen. The lower third of the screen is reserved for a command box. Compared with other current games in the genre from Legend or Sierra On-Line, Inc., the actual adventure game technology for **Plan 9 From Outer Space** is comparatively primitive.

All of the limitations of the traditional adventure game – repetitiveness of command input over time, lack of a sense of movement through an active environment, etc. etc. are all there. Nonetheless, the graphics and animation are generally quite good, and there are a number of animations of moving characters which rival or even excel those found in the best adventures.

Bach to the future

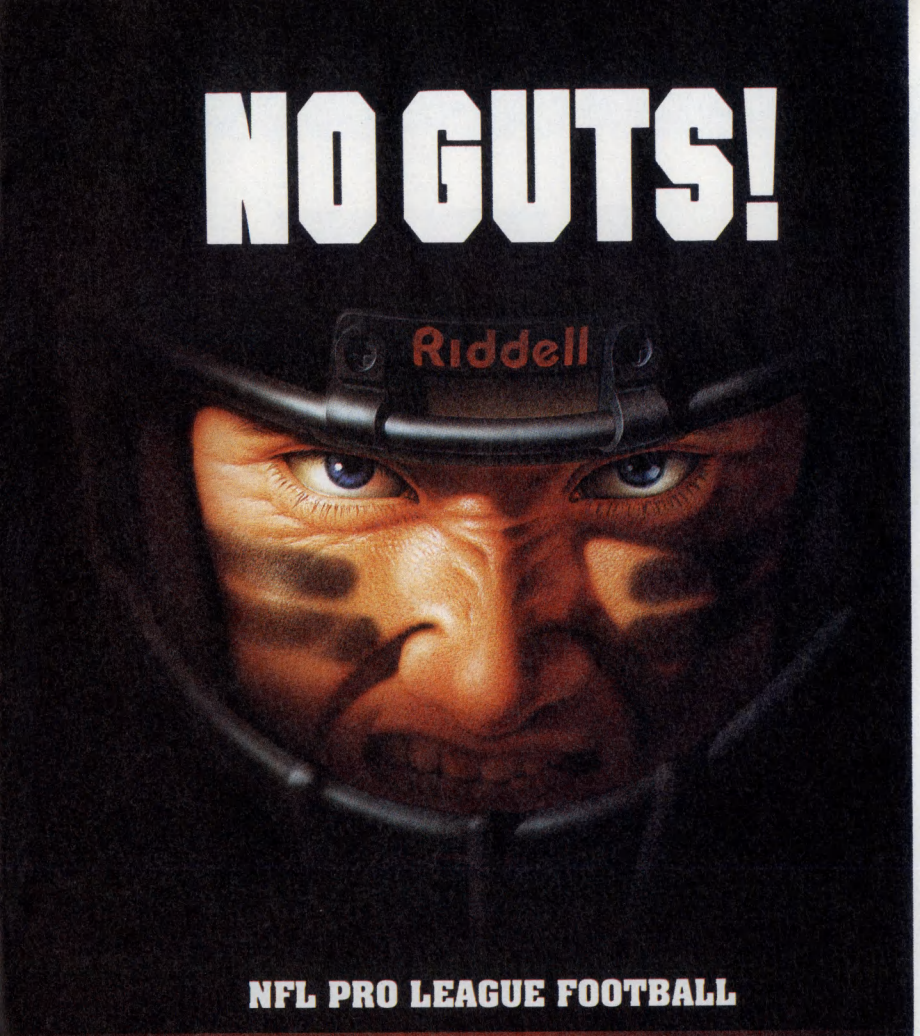
Sound is another story altogether; despite a few well-timed sound effects in the game, much of the play is accompanied by a repeating tune, which quickly becomes grating upon the ear after the first thirty times through or so. Even Bach's Partitas for Violin won't bear such constant repetition.

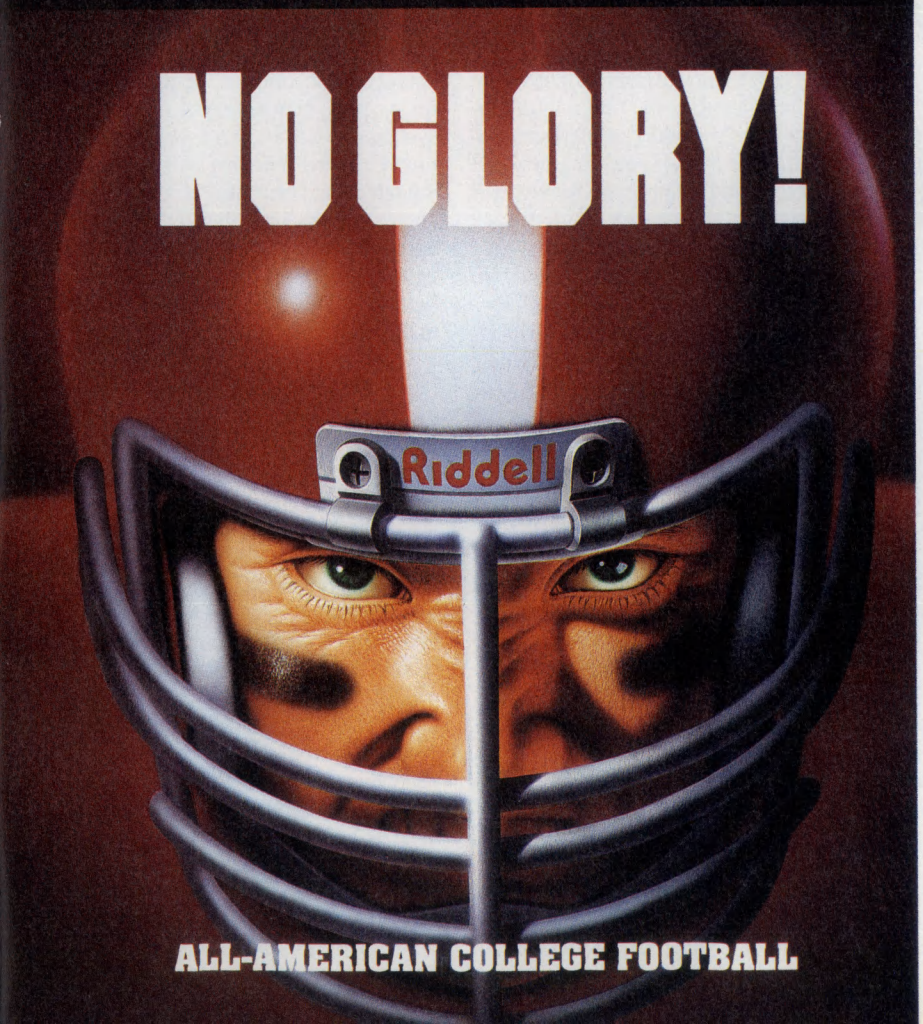
The game is very object-oriented in structure, meaning that the main thrust of the experience is to find the right things to combine with the right other things in order to open the way to the next few screens of the story.

From the very start, there are certain frustrations built into the design, such as a number of locked places without any clear indication about how one might go about finding a few keys. There are also a number of objects present without any clear indication of their potential function in the story. The game is not conceived clearly enough to give the player good signals as to what's important and what's a red herring from the start.

However, the story is a fresh approach to the genre, and the text responses to player input are chock full of British humor. The design team obviously does not take itself too seriously in **Plan 9 From Outer Space**, and the light-hearted touch seems neither self-aggrandizing nor distracting during play.

If you're an adventure game fanatic, there will probably be many things about the style of **Plan 9 From Outer Space** likely to prove appealing; it takes the genre and tweaks its nose (you didn't know genres had those, did you?), and it captures the quirky and slightly greasy feel of the world of the low-budget production perfectly. Don't expect any marvels of technological performance along the way, though. ❑





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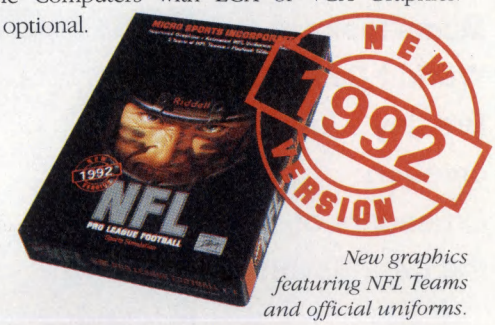

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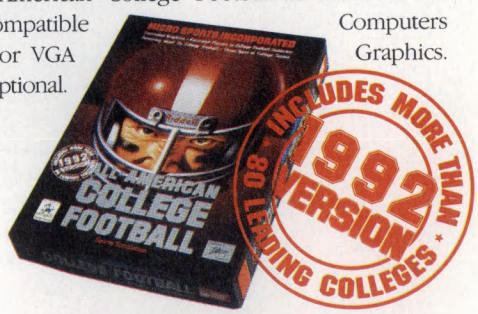

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MAMA SEZ...
testing can be testing

Mama looks at Wiz kid David W Bradley's latest creation: Crusaders of the Dark Savant

Way back in the deep dark past, MaMa's mama took her to the movies for the first time. I remember how big the movie theater was and that we sat in the wide aisle by the exits. I remember wondering where these wonderful pictures would be. I thought maybe those squares of light over the pillars up near the ceiling would be where I should look....or maybe those lights on the seats at the end of each aisle had something to do with the pictures. The curtain was so big and heavy looking that I never really thought it would move.

I was still fidgeting and wondering when the lights dimmed, the curtains swept to the side and the lion roared. I'm sure my little chin was resting on my skinned up knees as Dorothy and Toto and the rest of the cast appeared. I know I was frozen with fear after the tornado hit and that nasty old lady appeared in the window. My heart was still counting my ribs when Dorothy, awakened, moves cautiously to the door, opens it ever so slowly, and... and six year old mama has a memory so vivid, so breathtaking, that decades of movies, F/X pyrotechnics and even *Terminator 2* haven't dimmed the feeling.

That is exactly the feeling Mama got when she moved from **Wizardry 6: Bane of the Cosmic Forge** into **Wizardry 7: Crusaders of the Dark Savant**. **Wiz 6** was something new and different and wondrous in the world of **Wizardry**, but was merely the black and white introduction. MaMa sez... **Wizardry 7** is *Oz* with a real wizard behind the curtain, David W Bradley.

Anticipation, tease, payoff. **Crusaders of the Dark Savant** is everything we fans of the David W Bradley **Wizardry** games could have hoped for, and a whole lot more. But oh, the tortures we must endure to participate in the crusade! Gargantuan bug-eyed monsters, slimy sloshing pus balls, giddy little broads on air scooters, drooling drippy teenagers, weasely rotten rats, over-the-hill mutant ninja men of the cloth, boisterous ruffians armed with blunderbusses, confused shades, rubbery shrubbery with a nasty disposition, and tons of other denizens of Lost Guardia provide the distractions. Yes, just the distractions. Enter MaMa: beta tester.

Beta blockers

The gameworld itself is the torture chamber -- huge, well equipped and just waiting for some sucker to cruise in with a false sense of confidence. Boy, did this one ever knock me down a peg or two. MaMa always thought that beta testing was glamorous and neat and filled with perks like maps and skip this keys and stuff like that. Not! I was supplied with the game disks, a stack of blank graph paper -- *blank* mind you! - and one sketch of the general overview, a stack of bug-report forms, a draft copy of the manual and an emergency phone number. Humph. So much for the easy life, on to the good life.

The good life: all of the wonders of **Wizardry 7** and lots of time to discover them. The character generation system is similar to that of **Bane of the Cosmic Forge**, but much smoother and more detailed. Since the beta testers had to roll a new party with every version, the system got quite a work out. I never found it to be annoying or boring, although a character must be completed before an exit or re-roll can begin. The variety of races, professions and character options is intriguing. Familiar, but more sophisticated than those offered in **Wiz 6**.

Party shopping

The character screens are several layers deep, but very easy to navigate. All regular game functions such as item use, transfer, merge, etc. are available on the first screen, and a single click of the mouse on various areas of the display brings up pack items, spell options, the skills display, professional status, and anything else the gamer wants to know about each character in the party.

Moving from character to character is done by clicking on the right or left side of the portrait. Item transfers are done in the same way. In the course of gameplay, whenever a use item command to one character can affect or be applied to another character, a mini-screen is displayed with portraits of the

entire party to allow proper application of potions or spells.

Spellcasting, item use and combat mechanics are quite similar to those used in **Bane,** and combat itself is nearly identical. For a very short while at the beginning of the game, the sense of **Wiz 6** is so strong that it might occur to the player that this is merely **Bane** in fancy dress. Better graphics, socko sound effects, lovely animation, and a superslick interface, but just good old **Wiz 6**? This, like much else in **Crusaders**, is just an illusion.

Worldly alliance

Wiz 7 is not **Wiz 6**, redux. **Wizardry 7** is not a sequel to **Wizardry 6**. **Crusaders of the Dark Savant** is the maturation of what, until now, had been the benchmark classic crpg, **Bane of the Cosmic Forge**. In fact, **Wizardry 7** may well turn out to be the definitive crpg of the genre. None of the games that I have played to date, including **Bane**, **Ultima Underworld**, **Might and Magic**, or the **Ultima's**, can come close to the scope and power of the complete **Crusaders of the Dark Savant**. All of **Bane** and all of the possible endings to **Bane** amount to a starter dungeon for **Crusaders**. The entire **Bane** story is just a sidebar, an abstract of party history, a transitional speech to lead us into the world of the **Dark Savant**.

All of the things that made **Bane** such a marvelous gaming experience are carried forward in **Crusaders**. David W Bradley has created a complete world, satisfyingly complex in every detail. He has given structure to the world in a story that is rife with all of the characteristics and foibles common to mankind. The world has a history which the gamer can discover. The world has alliances and factions, good guys, bad Guys and opportunists. The world is peopled with true characters -- greedy, conniving, puzzled, powerful, not-so-powerful, opinionated -- and each character can interact with the player's party in many different ways.

Into this grand milieu, Bradley has also tossed some direct competition. Through an artificial intelligence routine, another party is playing the game at the same time as the player; and since that party has access to the game files, it can beat the party to treasures or puzzle solutions. After fighting and solving her way to one of the more obscure puzzle solutions, all Mama found for her troubles was a bunch of footprints in the dust and an empty chest. One of these days, Mama's party is gonna get that bunch! One of these days...

Devious nature

Crusaders of the Dark Savant has some of the most devious puzzles ever in a RPG. Many of the puzzles are interdependent and placed in combination with convoluted mapping exercises. One small area of the game, the Funhouse in the Rattkin Ruins, is the equivalent of a complete crpg. Many of the puzzle solutions echo those found in **Bane**, but not one is a giveaway.

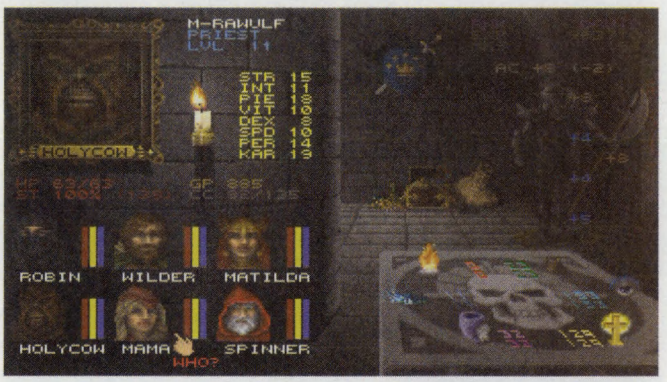
Graphically all of the spell icons are animated, as are many other portions of the display. The animation is neither intrusive nor gaudy and it adds more than a little flare to every screen. The central view screen where the scenery and monsters appear is also animated, all of the time. Birds fly by in the woods, and the dancing Furies whirl in a full 360 degree animation. Each spell has a different sound when cast and every member of the bestiary has a signature voice, moan, groan, roar or howl. The Undead have a particularly bone chilling moan that even bothers my dog, and many of the human style type monsters utter speech bytes.

After several hundred hours in Lost Guardia, MaMa is still enraptured, but with every newly discovered trap or plot twist or missing treasure, she is more and more sure that Mr David W Bradley needs a taste of his own medicine.

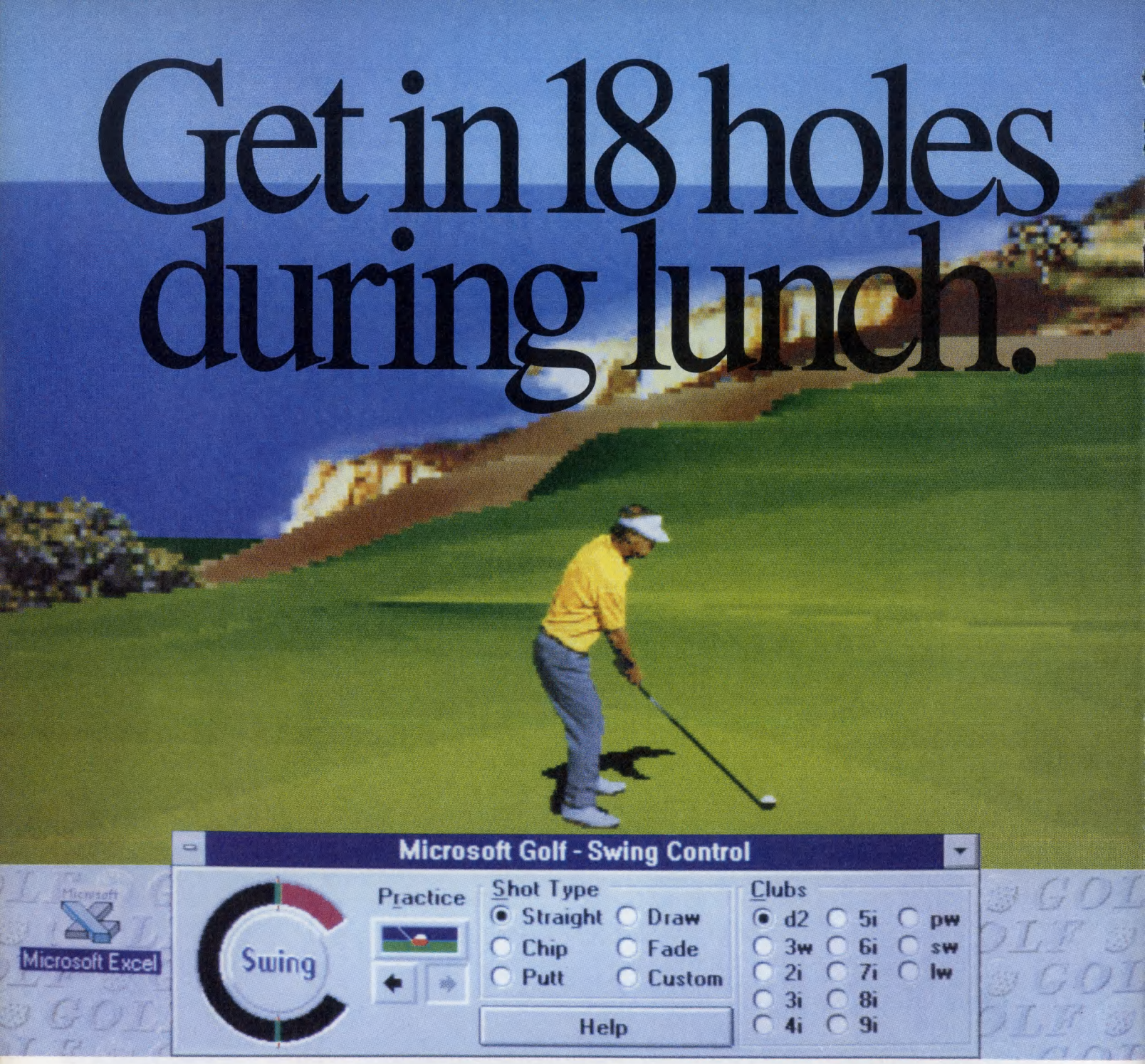
Head smackin' good

The first time he called me on the phone to discuss a reported bug, I greeted him as Mr Wonderful, creator of this marvelous world. After subsequent conversations, I could gleefully strangle him. Somewhere in the heart of this genius is a cheery little gremlin that just loves to torture lazy gamers. There is a very fine line between love and hate. MaMa sez... I hate that man (while failing to solve a puzzle) and also sez... geez, what a guy when smacking her head with the proverbial 'how could I be so dense'. Mama sez... there will be a lot of head smacking and months of fun ahead for **Wizardry** fans.

Last night that nasty man said he fully expects none of us will ever find all of the secrets hidden in **the Dark Savant**, nor will any of us see a more complete crpg experience in this genre. MaMa takes that as a challenge, and as a promise of great things to come. ❑



Get in 18 holes during lunch.



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BLOCK BUSTERS

Laura Bow II: The Dagger of Amon Ra

When Sierra releases a new game there are certain things I expect. The now familiar point-and-click interface, excellent graphics, a soundtrack that no other publisher can match, and a strong story. That's all. When Laura Bow II: The Dagger of Amon Ra arrived I was not disappointed. All these elements are present although the interface has been modified somewhat to accommodate the mystery genre.

Laura carries a notebook and makes entries as she gathers new information. She can ask any character in the story about any of the entries in the notebook using the new 'ask' icon. To make certain that all available information is gathered Laura should ask every character about every entry in the notebook. This adds a degree of tedium to the game but enough of the answers are interesting to ensure the process is merely time-consuming rather than boring.

The story involves Laura making the trip to New York City before investigating a theft that quickly evolves into a multiple murder case. Miss Bow spends most of her time in a museum trying to stay alive long enough to discover the clues needed to crack the case. The museum is a veritable haven for suspicious characters making it a tricky operation to find the guilty party. The finale has Laura testifying at a coroner's inquest to identify the murderer. The difficulty level of the game is challenging so the following could be of assistance to the terminally stuck.

General tips

Laura may make entries in a notebook but that doesn't let the player off the hook. Many conversations contain clues useful in solving the various crimes. It is also important to keep track of items found at each crime scene. Careful note taking will spare those of us with poor memories the need to remember every detail, while even those with a mind like a steel trap will need to refer back to notes occasionally.

Visit each room or scene as many times as necessary. When the action seems to stop it may just be waiting for Laura to revisit a location to see a new development. When in doubt wander around and listen in on any conversation that may be going on.

Act 1

The most important item in the game is obtained from three young boys. They will trade it in exchange for someone else's idea of trash. The desk sergeant is cranky because he hasn't eaten.

Act 2

Make sure to speak to every guest at the party. Ask about everything in the notebook. Do it now because not all of them will be available later. An item on one of the tables will come in handy should Laura have a need to 'accidentally' overhear a conversation on the other side of a closed door.

There is one important item in the gift shop. Examine the daggers in the glass case very carefully. Notice anything different about one of them?

After getting kicked out of the gift shop it's time to do a little eavesdropping. Walking behind the parties is usually the best means of listening in. Eventually, all relevant exchanges will be heard and the party area will be free of characters.

Time to explore the rest of the museum: pick up the bone in the Tyrannosaurus Rex room. Those mummy coffins in the Egyptian room sure look interesting. Maybe Laura should look inside.

Act 3

Yvette's office has two important items. Carbon paper that can be read if held up to the light and a light bulb needed elsewhere. Carrington's office is a treasure trove. Search the fireplace for an item that will make a clue found on Pippin's body more meaningful. Examine his calender and phone list. The phone list helps unlock a nearby sayff...err, safe. Where is the safe? In the usual place of course. Finally, use the intercom to listen in on conversations around the museum.

Reading the notebook reveals that a meeting was scheduled in the Egyptian room at 10:15 P.M. Go there at 10:100 to keep the appointment for the recently deceased. While in this room, it is also advisable to use the magnifying glass on the Rosetta Stone fragment.

The Pterodactyl room has two significant items. After the meeting in the Egyptian room, the second corpse is discovered here. There is also some wire that will be needed later. Laura may not have the right tool to claim it yet, but come back for it later. To discover the head belonging to this corpse, examine an area where there are a number of disembodied heads already. A return visit to Carrington's office reveals a third murder. Initials scrawled in blood point to a book containing useful evidence.

Laura Bow II: The Dagger of Amon Ra

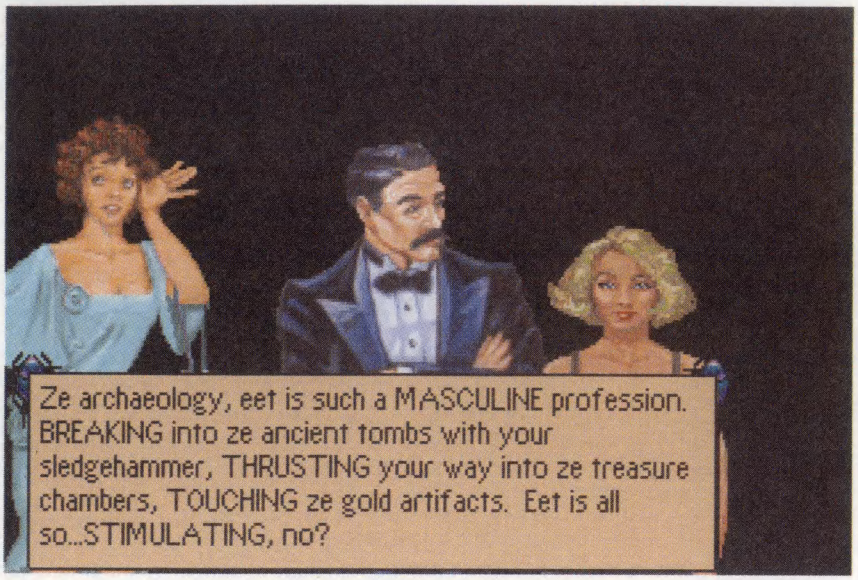
Designed by
Ben Balfour

Published by
Sierra On-Line

Systems
PC

Graphics
256 color VGA

Supports
Most popular soundcards


Ze archaeology, eet is such a MASCULINE profession. BREAKING into ze ancient tombs with your sledgehammer, THRUSTING your way into ze treasure chambers, TOUCHING ze gold artifacts. Eet is all so...STIMULATING, no?

When it is 12:45 A.M. go the armor room and hide behind a large hanging object for another interesting meeting.

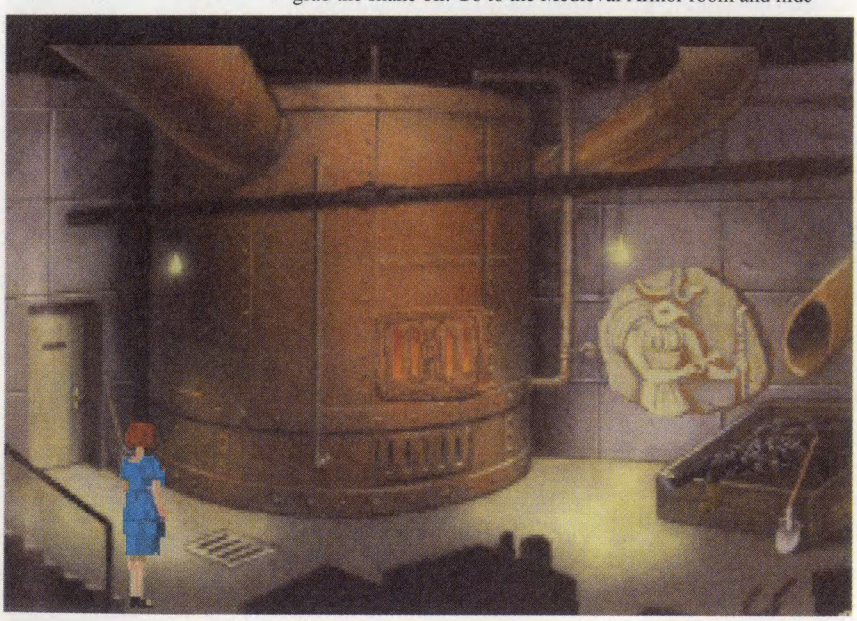
The thinker statue doesn't have a stiff neck. Take advantage of that to open a secret passage leading downstairs. For anybody who is wondering, yes this is an emergency. Break the glass and claim the item revealed.

Heimlich's office has three items of interest: a carefully hidden book of poetry on the third shelf up from the floor, a piece of cheese on a mousetrap, and a button behind his metals. The cheese can only be claimed if the mousetrap is set off from a distance with an inventory item.

In Ernie Leach's office take the snake lasso, search his toolbox, read the book on his desk, and at some point push the button behind his desk. Use the tool in Ernie's box to obtain a key in Old Masters Gallery. The key is hard to find, but it makes itself semi-visible every few seconds.

The skull on Dr. Myklos' desk will open a secret tunnel if used before doing anything else in her office. Once the tunnel has been explored, try and grab the snake oil on her desk. Also, be sure to check out that object under the covering. In the preservation lab, search the vat Dr. Myklos asked Ernie to check.

In the storage room at the rear of the lab, get the meat out of the locker. Use the key on the trunk, then quickly throw the meat in. Don't leave without the item the corpse still possesses. Also grab the snake oil. Go to the Medieval Armor room and hide again at 1:45. After listening in on the conversation, return to the mastodon room.



Upon discovering the body in the mastodon room, examine it carefully. Take note of the smell of the body and find the foreign object on the corpse. These two clues combine to reveal the exact location of his murder. Take a walk into the Old Masters Gallery to wrap Act 3 up. Pay close attention to the discussion between O'Riley and Heimlich.

Act 4

Visit Yvette's office, the Preservation Lab, then return to Yvette's to advance the story. Collect the three new objects found in this last visit to her office. Use the bone to crack the new statue in the Old Masters Gallery. Collect the bifocals and hair after examining each. A trip to the Medieval Armor display reveals a new piece of evidence.

A trip to Dr. Myklos' office is in order. Use the snake oil on Barney three times to corner him, use the snake lasso to capture him, and use the cage to make the room safe. Before examining the Countess, go to the Preservation Lab and refill the snake oil from the container on the desk. It is needed later and there won't be an opportunity to get it after examining her, After returning, take the two objects found and examine her ankle.

Now leave the office and step into...

Act 5

Run! Go into the Pterodactyl Room and use wire on the door. Then head for the Medieval Armor display, close the door, and use the board to slow down the murderer. Next head for the Egyptian display. Halfway there push the chair next to the door and then push the transom. Run into the Egyptian display and hide in one of the mummy coffins. Push the hanging crate in front of the door and cut the wire holding it to block the door. Push another crate to reveal a secret door.

After getting off the elevator close the door and use a mummy to block the door. One of the mummy coffins has a device on its forehead that the snake lasso can reach. The answers to the riddles rhyme. One has to do with the unborn and the other has to do with the dead. Uncover Steve's face and use one of the Countess' items to wake him up. Return his boot before he tries to stand.

To escape the furnace room push the carved stone. Once in the tunnel use snake oil to repel the cobras and throw the cheese behind the rats. To exit safely, use the right hand doorway. To keep the murderer at bay one last time push the button to activate the Tyrannosaurus Rex.

Coroner's Inquest

All of the murders committed in the museum were done by the same person. Only Carrington was killed by a different suspect. The person who killed Carrington also impersonated him and helped steal the paintings. The middleman is a typically shady underworld type. The motive for each of the museum murders was the same except for Yvette. The murderer is also the one who stole the Dagger of Amon Ra. Last chance: Laura heard the murderer threaten Yvette with death.

Joseph Boone

Dark Queen of Krynn: Part 2

In part one of these hints, we visited Palanthas, Caergoth, The Caves, Naulidis, Celanost, and the Luminari Lighthouse. In order to progress to the next location, Kristophan, the party must possess the two keys that Fastillion yielded in the lighthouse. The missions in Kristophan begin with some kissy face in Eshalla's home. Go with the flow, and humor her whenever you meet. This will get the party some neat items later, while wandering around town. In the town you will have a chance to attempt to res-cue someone from an over-the-hill Minotaur. Take the opportunity and you will wind up in the Arena which is tough, but a victory

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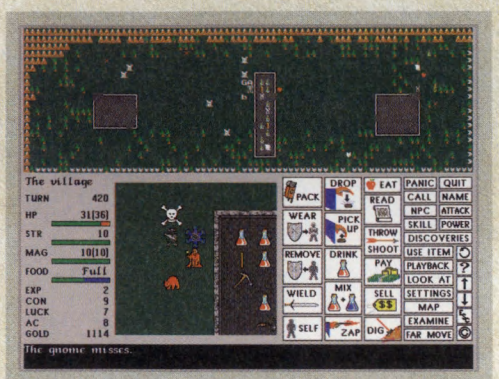

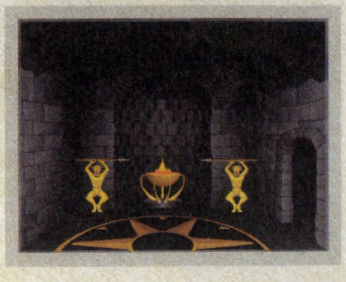

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there will add some very powerful weapons and armor to the inventory. The closed Temple is where the action is, and to enter that, Selias must be a member of the party. Selias hangs out in the Tavern.

Entering the closed Temple gives access to the Tombs and the eight mazes that compose them. Be sure that SEARCH is on; there are lots of hidden doors and passages. The first is the Thieve's Guild, which is just a transition to the White Hall, where the search for each of the five pieces of the Oracle begins. A heart shaped key and a golden circlet are needed to pick up two pieces, another is in the circus. Two pieces are on the second level, one of which is hidden in a bunch of loot after a vicious battle with vampires. The golden key will give access at the stairs, and the rusty key can be used in one of the hollow columns in the maze that follows the vampire battle.

Book worms

Check out the library before leaving town...get as much information on the Book of Armacor as possible. The only vault in the game is located in Kristophan. Note that the five oracles are five notations in the Adventurer's Journal.

From Kristophan, head to the tavern in Trilloman and listen carefully for the location of the Hulderfolk. They harbor the location of our next stop and the first really critical quest of the game. Successful competition of the elven challenges will gain the party a ring that detects deceptions and a necklace that has the dragon scale on it. There is a rather arduous route to the acquisition of these things.

The Hulder are elven pranksters that require the party to learn the language in order to solve this quest. There is an area view with coordinates available when the region is first entered, but the view will disappear just when you need it the most. The party will be autowalked into the woods at a point directly east of Trilloman. An NPC called Tasselhoff Burrfoot is lounging in the woods. Find him and allow him to join the party.

Family tree

Note the location (coordinates) of the Mother of All Trees while the area view is still available. Wander around in the woods until the party suffers from hunger pangs. Really suffers. Then try to rest or fix and Elea will appear and begin to teach the party the language. Journal entry 29 lists the ritual words and their meanings, but the party must learn them from Elea before progress can be made with the royal family.

Note where the elven camp is located while the area view is still present. Do not let on that you know Elea while you are in the elven camp. When the royal family questions the party about where it has been, tell the truth. The assignment to count the leaves on the Mother of all Trees leads to the solution of this quest. The number of leaves on the tree is random, so at least one count is necessary. When the count is obtained, report back to the royal family and listen very carefully to the king. There is an easy solution to this puzzle, or the party can keep on counting the leaves until Elea rescues them. The exit is where the Elven King tells you it is. If the party accepts additional elven hospitality, expect a dirty trick. Ultimate rescue will be provided by Elea who will ask for a favor. Grant it.

Rebel shell

The next places that should be visited are Aurim and Hawkbluff. A brief visit to Hawkbluff will give the party some clues, but there is no real action available in Hawkbluff until Aurim is cleared and Trandamere has been forced to run away. Trandamere hangs out in the palace which is at the center of Aurim. The party must have a pass to enter the palace, and only one pass is available; so once the palace has been entered, stay until the job is done. A pass can be obtained from either the Thenol commander's house or the from the rebels. Enlistment in the army is a very good idea since the proper uniforms can work wonders, especially in the palace.

A clue to the commander's pass is found on the desk in his office. The other pass is available from some rebels that hide in the NW corner of town. Check out all of the residences and shops in that area. None are what they appear to be. If the party frees the prisoners, access to many rebel goodies, including the pass, is theirs.

The rebel hideout is at 3,14. The ring obtained from the elven Hulder quest will glow when the party meets Draconian's that have shape shifted into other forms. Attack or run when this happens, depending upon your willingness to engage in huge battles. If the party decides to clear the Hith Temple, a major decision, the way to get to the three part battle is to ask for a special blessing. The Thenol soldiers tell the party about this, so beware of traps.

A lulu

The first battle segment is a lulu, and I never made it to the second or third parts. Only one character's TURN action seems to be effective in each round and there are what seem to be legions of undead in this crew. Only melee combat seems to affect the skeletons, but the vampires and other spirits can be turned. Keep a good distance from the vampires since their main attacks will drain the party members. Spell up for protection and have clerical attacks ready.

The party can train at the home of the Old Lady rebel. Access the rebel hideout by selecting HEAL from the phoney temple options. Save the game before entering the palace and be sure the party has enlisted in the army and acquired the proper uniforms.

Before beginning to clear the palace, go upstairs and locate Grunschka. She is a feisty fighter and will remain with the party. Another reason for going upstairs is that it will allow the party to rest and fix...things that cannot be done on the ground floor until a gong in the basement is found and disabled. To find the entrance to the basement of the Palace, be sure to show the guards the uniforms being worn. Acquire the clay tablet fragments, accept the assignment of the troop transport, attempt to take the recruits to Hawkbluff, and find the royal chambers upstairs where the party should speak with the queen. Chasing Trandamere to Hawkbluff begins the next segment of gameplay.

Next month we will complete the game with hints for Hawkbluff, Bai'or, Blackwater Glade, Aldinachru, and the Flame Tower. ❑

Joan McKeown

The Dark Queen of Krynn

Published by
SSI (US)
US Gold (UK)

Systems
PC and Amiga

Notes
A full review of this game appeared in issue 22

Dusk of the Gods

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Spaceship Warlock

A Fight at the Opera

by Stuart Mitchell

Designed by
Mike Saenz and Joe Sparks

Published by
Reactor

Systems
Color Macintosh IIs with CD-ROMs
PC CD ROM to follow

CD ROM is the next break through in technology for computer users, if the industry pundits and prognosticators are to be believed. CD ROM ups the ante in storage, offering an order of magnitude increase in the available memory for computer software. **Spaceship Warlock** is the first of a new breed of games created specifically to take advantage of the new capabilities CD-ROM drives bring to home computers, and, more importantly, is one of the first to make good use of those capabilities.

Render Mac

Spaceship Warlock is essentially a standard adventure game played from a point of view perspective. But this simple statement says little about what makes the game so unique. It is a bit like describing a Ferrari as a sports car, for **Spaceship Warlock** stretches the boundaries of standard adventure games in a variety of ways. First, there is digitized audio used liberally throughout the game. Interactions with other beings involve speech, then there are talking advertisements. The opening theme is a full-blown rock song. Other sound effects abound and add immensely to the texture of the universe.

Mac attack

The graphics come in the Macintosh standard 640x480 resolution in 8-bit color. No low res ported graphics here. Most of the images were created using 3-D modeling software. These objects have been rendered so that they are smoothly curved and look natural. For those who haven't seen fully rendered 3-D objects, the effect is stunning. Instead of blocky polygons or flat bitmaps, one sees natural looking objects that are clearly 3-D. Best of all, these objects are animated and move very fluidly. I simply stood on the streets when I first started playing, just to watch the sky cars fly by overhead as they smoothly scaled and turned like the best footage from *Blade Runner*.

Rock and Kroll

Spaceship Warlock's plot is pure space opera. The player's character starts on a planet in the Kroll Empire (formerly the Terran Empire). Humans have been enslaved and the Earth itself hidden by the Kroll. The Kroll are an insect like alien race with Cyclops heads and electronically altered voices. The catalog of their sins is long, but their worst offense seems to an insistence that humans pay their Kroll taxes (I always knew tax-happy politicians couldn't be human). At any rate, the player's job is to get off-planet and try to find Earth. This is accomplished by joining up with a human space pirate on his ship, Warlock.

Interaction with the game universe is performed with the mouse, supported at times by a very limited parser. Sometimes this means a close-up, sometimes an animated sequence. The results of clicking change depending on what is being clicked. At one point I clicked on aliens. The result was that I punched them. I kept clicking and eventually knocked them out. In another location, I clicked on an alien belly dancer and she moved around the room.

Glossed out

Experienced players may be put off by the simplicity of **Spaceship Warlock**. I must emphasize that, whatever its limitations, **Spaceship Warlock** is fun. The game may not last as long as I would like (4 to 6 hours at most for experienced adventurers), but every moment is enjoyable. In fact, I found myself getting so used to the high-res gloss of **Spaceship Warlock** that I found lower resolution games on the PC nearly intolerable.

A few companies have made major enhancements to existing products to take advantage of CD-ROM drives. But even fewer have taken the next step - games created specifically for the CD ROM environment. I know of three - Icom Simulation's **Consulting Detective**, Broderbund's **Grandma and Me**, and now **Spaceship Warlock**. For my money, this is the best game in the bunch. I could wish for more sophisticated interactivity and a longer game, but that shouldn't deter CD-ROM owners from giving **Spaceship Warlock** a serious examination. ❑

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WAY TO GO!

by R C Paulsen

Nemesis: 5.0

Designed by
Bruce Wilcox

Published by
Toyogo

Systems
IBM PC (DOS and Windows) Mac

Players
1-2

Supports
Mouse Keyboard Modem play Printers

Many Faces of Go

Designed by
David Fotland

Published by
Ishi Press (US)
Infogrames (Europe)

Systems
IBM PC

Players
1-2

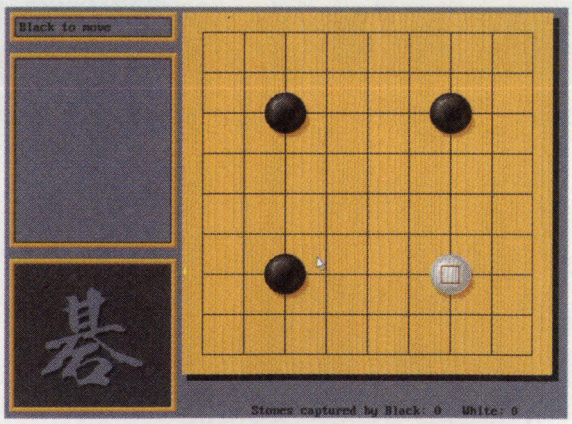
Supports
Mouse keyboard

The Rules of Go

Go is a game of territorial war between two players. The object of the game is to surround territory by placing markers on a

Long, long ago...

Go is the oldest of all board games. Various sources cite different legends of Go's origins, but most agree that Go originated in ancient China about four thousand years ago. Today, although largely unfamiliar to the Western World, Go is very well known throughout the Orient -- at least as well known there as chess is here in the Occident. China, Korea, and especially Japan have adopted Go as one of their favorite board games. In Japan, it is featured in regular articles in popular newspapers and magazines. Tournaments and instructional programs are televised. Master-level players earn their living teaching the game.



One of the many faces of GO

Go goes west

Go's popularity in the Western World has been slowly growing for the past 100 years. Don't think that this is a slow start! This is but a brief moment in the history of Go -- it took much longer for it to spread from China to Japan! Early Western exposure came from Chinese immigrants to San Francisco in the latter part of the nineteenth century.

Edward Lasker, the famous Chess master, learned Go from Japanese students at the University of Berlin in 1907. His 1934 book, *Go and Go-Moku: the Oriental Board Games,* helped spread the popularity of Go. This book was reissued, with Lasker's extensive revisions, by Dover Press in 1960. Today the American Go Association very actively supports Go in the United States by publishing a journal, coordinating local club activities, sanctioning national tournaments, and providing other services to the American Go-playing public.

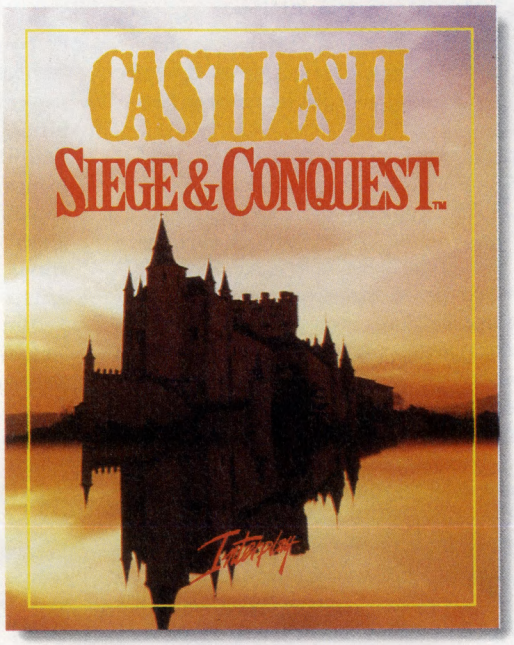
Go has survived virtually unchanged for thousands of years because it appeals to people in very fundamental ways. One aspect of this is the astonishing depth and subtlety of game play that emerges from Go's simple rules (See sidebar page 72). The rules can be learned in minutes, but most people will never exhaust the possibilities for achieving a deeper understanding of the game. A common feeling is that the rules of Go are like the eternal laws of nature -- it's hard to imagine any significant change that could be made. Another way in which Go appeals to people is the aesthetics of the game. It is pleasing to the senses with the harmony of its basic shapes, colors, textures and sounds. (The best wooden boards are specially shaped to produce a pleasing 'click' when a stone is decisively snapped down onto the board.) Based on Japanese Go paintings, typically depicting games being decided by swordplay, it is clear that Go is considered an exciting, even potentially violent game by the Japanese.

Computers have a go

The authors of **Nemesis** (Bruce Wilcox) and **Many Faces of Go** (David Fotland) have pioneered the computerization of Go. For many years, it was generally considered beyond the scope of a computer program to play a decent game of Go. To someone marginally acquainted with Go, this may seem surprising. After all, the rules of the game are simple. And, in fact, it is quite easy to write a program that embodies the rules and allows two people to play each other. Producing a computer program that has any concept of strategy or tactics and that can determine a good move, not just a legal move, is another matter entirely. The difficulties lie in the huge number of possible moves at each turn and in quantifying the value of a move or the resulting position. The two authors must be congratulated on the progress they've made in overcoming these difficulties.

Both authors have been improving the strength of their respective programs over the past few years. More importantly though, they have been improving the programs' ease of use and overall usefulness by adding features to aid in the play of the game (like giving hints) and being generally agreeable Go partners.

Do You Have What It Takes To Win The Crown?



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board consisting of a square grid of lines. The standard grid is 19 by 19 but may be smaller for quick, informal, games. Each player has a supply of distinctively colored markers called stones (universally black for one player and white for the other). Unlike Chess and Checkers where play is on the squares between the lines, in Go, play is on the intersections of the lines. These intersections are called points, and it is the points that make up the territory to be surrounded. Also unlike Chess and Checkers, stones are never moved (except for being removed from the board when captured -- see below). Instead, 'movement' is accomplished by extending patterns of stones by adding additional stones each turn.

Territory is considered surrounded if the opponent cannot capture the surrounding stones nor play on the points in the territory without being captured. A stone is captured if it has no adjacent unoccupied points. (Diagonals are not considered adjacent.) Adjacent stones of the same color live and die as a unit. The game is scored by counting each player's surrounded territory. Captured stones are added to the score of the capturing player. To prevent stalemates, a player may not make a move which recreates a previous board configuration.

Dan sized

The most obvious question when evaluating such programs as these is, 'how good a game do they play?' Go playing strength is measured by the 'kyu' rating system for beginners and casual players. The scale ranges from 35 kyu for rank beginners who just learned the rules to 1 kyu for a very strong amateur players. For stronger, professional players, playing strength is expressed as 'dan' ratings, which go from 1 dan up to 9 dan for the very best professional players.

Nemesis claims a playing strength of 13 kyu, and **Many Faces of Go** claims a strength of 15 kyu. My experience (as an approximately 10-12 kyu player) is that **Many Faces of Go** is a little stronger overall, although **Nemesis** seems to have the better early game. Since Go makes it easy to give the weaker player a handicap, both programs can be matched to stronger players by giving the appropriate handicap to the program. In short, both play a modest game, but both are good enough to give most casual players a good game.

Each program supports a mouse-driven interface. This is important since it makes the programs easy enough to use that it is almost possible to forget that the game is being played on a computer screen, and not on a real board. **Many Faces of Go** has the edge here. Its interface is easier to learn and its VGA graphics are exceptional. **Many Faces of Go** goes a long way towards bringing the aesthetic aspects of the game to the computer screen.

Playback payback

Both programs provide the beginner with an excellent introduction to the game; they will give hints when asked and will explain reasons for moves. This can be quite useful in learning the game. In this respect, **Nemesis** has the edge -- it has an excellent method of graphically showing its analysis of the board in terms of overall areas of control and potential. When used with Wilcox's Instant Go Starter Kit (included with **Nemesis**), this is an excellent way to quickly understand many of the important aspects of the game, especially the large-scale strategic concepts. This will quickly improve the play of any beginner. Instant Go is Wilcox's term for his theory of Go.

Another feature useful to the beginner is the ability to play back pre-recorded, annotated games. Both programs support this, and both come with a few annotated games to review. The annotation is shown on-screen as the play of the game is previewed. The annotation shows various possible lines of play and discusses their significance. **Many Faces of Go** also includes Go problems with solutions that are displayed and explained on-screen. Ishi Press offers many on-disk annotated games which can be used with both programs.

Novices who have progressed a little beyond the rank beginner stage will find **Many Faces of Go**'s Joseki Tutor of value. (Joseki are 'book openings'.) Nemesis also has a similar tutor called Joseki Genius, but as an extra-cost option. Another of Nemesis' add-on products is Tactical Wizard. This is a utility that solves 'life and death' problems. One of the important things a beginner needs to practice is tactical 'hand-to-hand' combat. Problems can be set up on **Nemesis**' board for **Nemesis** to solve, or **Nemesis** will analyze a local situation on a whole-board setup or as part of a game.

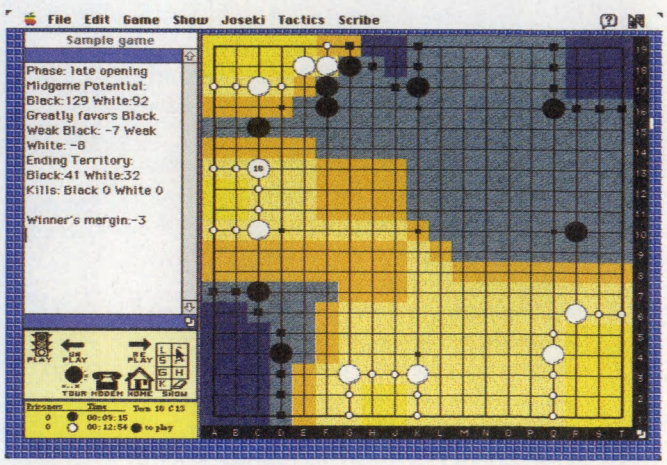
Tactical wizardry

Nemesis, although not quite as strong a player as its competitor, might be the better choice for the experienced player because of its additional features and add-on capabilities. For example, **Nemesis** will display the elapsed time for each player and can moderate a game between human players over a modem. **Nemesis**' add-on products (Joseki Genius, Tactical Wizard and Scribbler) are integrated into the program and show up as menu options within **Nemesis** itself. Scribbler allows the user to produce annotated games for the instruction of others.

Ishi Press offers a similar utility called GoScribe, which is sold as a separate product. **Nemesis** can read and write games saved in the Ishi Press format used by **Many Faces of Go** and Scribbler. This is an import/export arrangement. **Nemesis** has its own format for saving games. **Many Faces of Go** cannot read **Nemesis** games unless they were 'exported' by **Nemesis** in the Ishi Press format. **Many Faces of Go** supports play on 9, 11, 13,15, 17, and the standard 19 line boards. **Nemesis** supports only 9, 13, and 19 line boards. This difference might be important to some.

Go which way?

No serious Go-playing computer user should be without at least one of these programs and will probably want both. The more casual player who may want to choose just one can be guided by the following considerations. **Many Faces of Go** is easier to use, more aesthetically pleasing, and plays a slightly stronger game. **Nemesis** offers better instruction in the theory of Go, including an excellent booklet and on-screen analysis of board positions and optional life-and-death analysis (Tactical Wizard), more expansion capabilities, and has some features the serious player might find compelling (modem play, timed games, universal saved-game format support). **Nemesis** also has a toll-free support line. In short, both are highly recommended. ❑



Meet your Nemesis

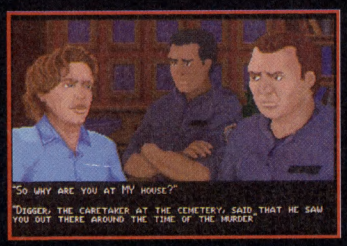
THE DARK HALF

BASED UPON
A STEPHEN KING THRILLER

Actual movie scene.

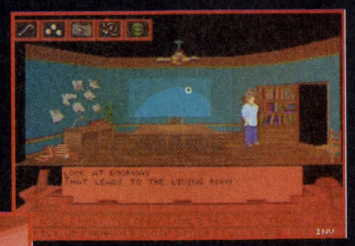
Detailed graphics based on the movie help set the scenes.

Gain helpful clues from interaction with other characters.



Plot the course of the game by choosing Thad's responses.

THE STARROWS ARE FLYING AGAIN. THAD BEAUMONT'S EVIL TWIN, GEORGE STARK, HAS RETURNED IN THIS THRILLING COMPUTER GRAPHIC ADVENTURE GAME BASED ON THE ORION PICTURES FILM, FROM THE NOVEL BY STEPHEN KING. AS THAD, A SUCCESSFUL HORROR WRITER, YOU ARE DRAWN INTO THE PSYCHOLOGICAL MYSTERY BEHIND YOUR EVIL TWIN AS HE COMMITS CRIMES AND MURDERS FOR WHICH YOU ARE BLAMED. TO DEFEAT HIS EVIL FORCES, YOU MUST DODGE THE POLICE, UNCOVER CLUES AND DISCOVER THE SECRET OF THE DARK HALF. ONLY THEN CAN YOU PROVE YOUR INNOCENCE, SAVE YOUR FAMILY, AND SILENCE GEORGE STARK FOREVER.


Use collected inventory items to aid in your quest.

Stop George Stark's murder spree before it's too late.

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FOR AMIGA: 1 meg memory.

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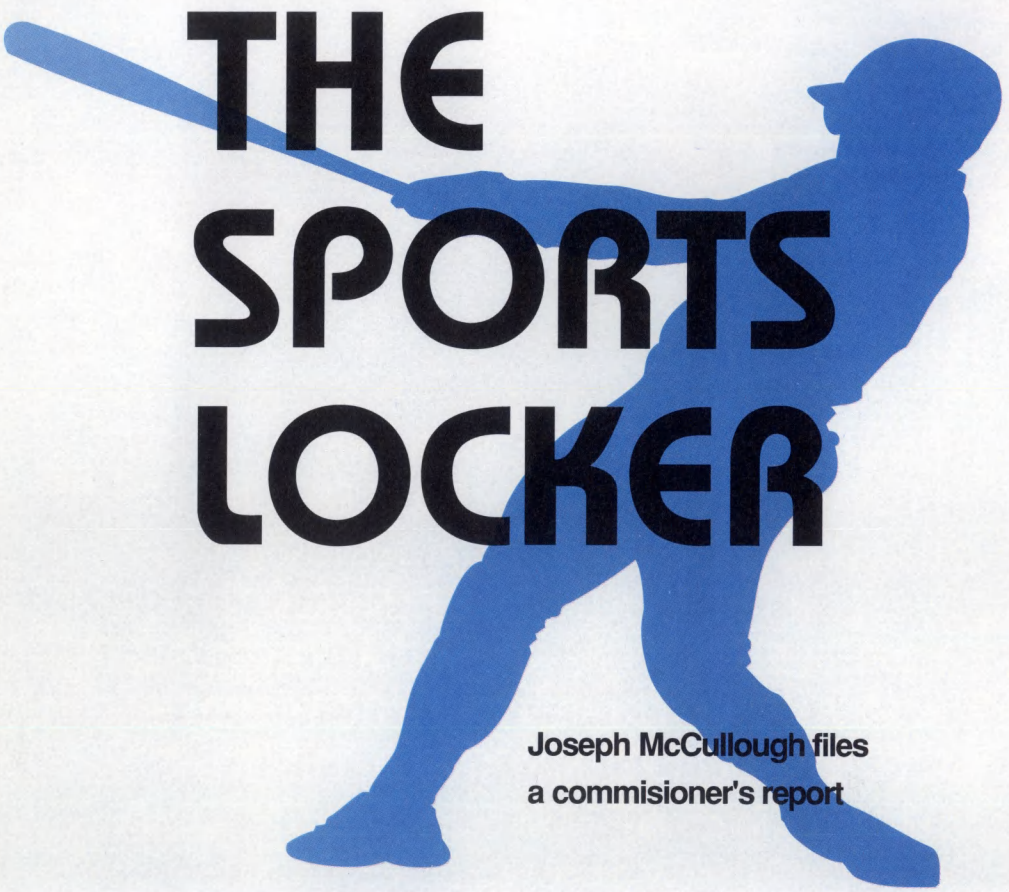


Joseph McCullough files a commisioner's report

Commissioner's Disk II for Earl Weaver Baseball

Designed by
Eddie Dombrower

Published by
Electronic Arts

Systems
IBM PC and compatibles

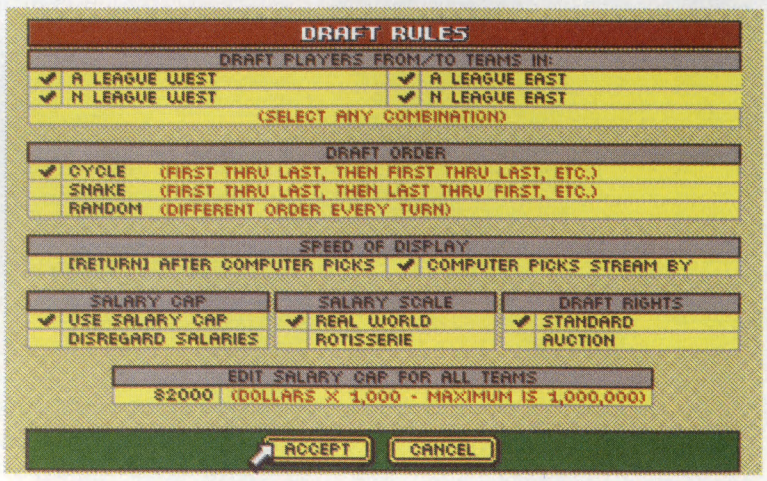
Graphics
MCGA

Supports
AdLib-compatible sound

Players
Multiple

With the release of the **Commissioner's Disk II** add-on to **Earl Weaver Baseball II** and **Tony LaRussa's Ultimate Baseball Fantasy Manager Disk**, Electronic Arts and SSI have captured the essence of major league baseball management. In fact, one could argue that they have done one better - created products which capture all the joys of baseball management without the prima donna egos. Each is chock-full of baseball utilities designed to delight any rotisserie league commissioner.

As add-on programs these products should integrate seamlessly into the parent program. **Fantasy Manager** gets high marks in this regard. Instead of launching itself from a sub-menu hidden deep in the program's structure, **Fantasy Manager** updates the resident program menus during installation. Had one not known that the expansion disk was installed, it would be almost impossible to tell that a modification had been made to the original program.



The **Commissioner's Disk**, in contrast, seems hastily tacked on to the original program. One wonders if any thought whatsoever went into the design of the user interface. To access its wealth of features, one has to first pull up the main menu, then choose Advanced Features. From that menu, a third choice finally launches the **Commissioner's Disk** - but not without first requiring the user to choose a file from a file-management box. Furthermore, the stats import facility is not even a part of the integrated package, it must be launched from the DOS prompt.

The user interface problems in early evidence in the **Commissioner's Disk** continue throughout the program. Frankly, the utilities are hard to use because they are presented so poorly. In comparison, **Fantasy Manager** suffers no interface problems. Its menus are easy on the eye and presents information logically.

Team and player editing

Both programs offer powerful team and player editing utilities. To be fair, **Ultimate Baseball** already had a player editor, as well as some low-level management facilities built in. The **Fantasy Manager** disk improves on the original design and adds some new twists. All player stats can be modified now in either program. In addition, they both support a team name and team color editor, as well as a home stadium selector. The **Commissioner's Disk** comes packaged with all stadium files and a stadium editor. SSI, in search of the almighty dollar, offers their stadium files as separate expansion disks, but does throw in a few token stadiums with **Fantasy Manager**.

The **Commissioner's Disk** also includes a terminal program which hooks into the on-line service, Stats

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Fantasy Manager for Tony LaRussa's Ultimate Baseball

Designed by
Beyond Software

Published by
Strategic Simulations Inc

Systems
IBM PC and compatibles

Graphics
VGA/MCGA

Supports
AdLib compatible sound

Players
Multiple

Inc, for up-to-the-minute stats downloads. This allows league participants to use current player stats in their rotisserie leagues. The service costs $20.00 for a year's subscription, plus $0.25 per minute while connected.

Manager profiles

What would baseball be without good management? Boring and predictable. To wit, SSI and Electronic Arts have included manager profile editors in their add-on disks. Each allows the player to assign a pre-set profile to a computer-controlled team, or to create custom manager profiles. During game play, the computer makes decisions based on the profile selected. The **Commissioner's Disk** manager profile editor has much more detail than the one offered by SSI. **Fantasy Manager** does include a feature, though, that allows the player to assign a profile during draft day. The manager for Cincinnati, for example, could be set to value good pitching higher than good hitting.

SALARIES/CINCINNATI

SALARY	POS	PLAYERS	B	AB	HR	AVG	SB	OBA	SA
1858	C	BAILEY, ED	L	383	28	.300	2	.384	.551
2763	CF	BELL, GUS	L	610	30	.300	0	.351	.525
4278	C	BENCH, JOHNNY	R	605	45	.293	5	.351	.587
2549	SS	CONCEPCION, DAVE	R	590	16	.281	19	.352	.415
5210	LF	FOSTER, GEORGE	R	615	52	.320	6	.382	.681
1604	RF	GERONIMO, CESAR	L	486	2	.307	22	.378	.414
2943	3B	JOHNSON, DERON	R	616	32	.287	0	.343	.515
5046	1B	KLUSZEWSKI, TED	L	573	49	.326	0	.407	.642
3237	C	LOMBARDI, ERNIE	R	489	19	.342	0	.391	.524
3845	2B	MORGAN, JOE	L	472	27	.320	60	.452	.576
1166	SS	MCMILLAN, ROY	R	448	1	.272	5	.366	.357
4047	1B	PEREZ, TONY	R	587	40	.317	8	.401	.589
3313	CF	PINSON, VADA	L	607	16	.343	23	.382	.504
3725	RF	POST, WALLY	R	601	40	.309	7	.372	.574
3280	RF	ROSE, PETE	S	627	16	.348	7	.428	.512
2844	CF	ROUSH, EDD	L	527	6	.351	10	.403	.531
3006	LF	TOLAN, BOBBY	L	589	16	.316	57	.381	.475
2199	2B	TEMPLE, JOHNNY	R	598	8	.311	14	.385	.430

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ACCEPT | PITCHERS | CANCEL

Before the draft, a manager needs a way of assessing available talent. Here is where the **Commissioner's Disk** shines. It includes what amounts to an ad hoc reporting engine. Want to know the third basemens' batting averages, sorted highest to lowest? No problem. Tell the program to sort by position/highest to lowest, and highlight historical batting averages, *et Voilá!*

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the report is generated. It includes columns for minimum at bats, minimum innings, and primary and secondary positions. Sure, **Fantasy Manager** stores the same data, but there is no easy way to retrieve it. Furthermore, only limited print support is included in **Fantasy Manager**. The **Commissioner's Disk**, in contrast, allows the user to print any of the reports it generates.

Rotisserie league commissioners will be most pleased with the player draft features included in both expansion disks. Each allows the commissioner to set draft order (cycle, snake, or random), teams in draft, and players available. **Fantasy Manager**, however, includes a player and team salary structure. The commissioner can set a team salary cap, and then set individual player salaries. Many rotisserie leagues use salary caps to equalize competition. SSI holds an advantage over Electronic Arts by offering this feature in their expansion disk.

Draft and player trades

Once draft day is over, managers inevitably want to trade players. Both programs offer this feature. Again, to be fair, **Ultimate Baseball** already had a trade facility. The **Fantasy Manager** disk improves on the original by offering up to three transactions at a time (instead of two). The **Commissioner's Disk** adds the ability to sign free agents, a feature not directly supported in **Fantasy Manager**.

Both **Fantasy Manager** and the **Commissioner's Disk** provide much-needed help to anyone running a rotisserie league. The player's priorities will help him decide which one is worth buying. **Fantasy Manager** offers a pleasing and easy-to-understand user interface, as well as a salary structure to equalize competition. The **Commissioner' Disk** is hard to use, but has more substance. It includes the ability to download stats, a more complete set of stadium and manager profile options, and unparalleled reporting and printing.

And the winner is...

For those who own a copy of either master program, the decision may have already been made. For those, however, who don't currently own a baseball game and who are searching for a hard-core rotisserie management aide, **Earl Weaver Baseball II** and the **Commissioner's Disk** is the best ball-for-ball, feature-for-feature. It may not have the style of **Fantasy Manager**, but it certainly has more substance. ❑

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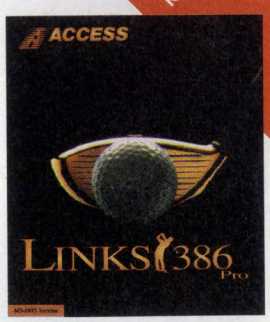

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COMMANDER CRUNCH REPORTS FROM THE HANGAR

Crunch discovers some tarnished heroes and goes diving in the Pacific

Most of the time lately, release of a new flight or air combat simulation is cause for celebration, even if there seem to be more bugs in final release versions these days than there used to be. However, the danger with a particular genre becoming popular is that it inevitably attracts a host of 'me too' follow-on products. Enough of these second-rate designs can kill an audience's enthusiasm and lead quickly to feelings of exhaustion, frustration and burn-out. Thus the importance of mentioning immediately that **Heroes of the 357th** is a real disappointment; this is not air combat at its worthiest.

Designed by
Dan Hoecke and Brian Hilchie

Published by
Electronic Arts

Systems
IBM PC

PC Graphics
VGA

Supports
AdLib, Sound Blaster sound cards, joystick, keyboard

Grouch potato

The problem is not so much with flight modeling -- which seems reasonable enough compared with, say, **Chuck Yeager's Air Combat**, the other simulation most similar in design and scope to '**Heroes**'; nor is it with graphics and sound, both of which are certainly up to par in the current arena of solid-fill design and digitized sound effects. Nor is it with the validity of the conceptual background, which is clearly well researched. What limits the design is the conception of both the tactical and strategic structure within which the P-51's operation is taking place.

Eyes front

To begin with, the software is structured so that learning of the mission's details, taking off and flying to the combat arena, and returning from either success or failure are all radically abbreviated into a few seconds' worth of movie-style animations. As cleverly and effectively animated as these mini-movies are, after the first couple of viewings they end up functioning as just so much dead-time prior to engagement in actual play. I'm sure Sierra On-Line and other companies designing adventures found out the hard way, that the last thing a computer gamer wants to do is just sit and watch the screen attempt to give him some facsimile of what he can get off the TV; the lesson has not been brought home to the design team of **Heroes**, however. The beginning and ending of each mission thus becomes a frustrating attempt to get past the animated sequences with the Enter key as quickly as possible. Even with a constant pounding on aforementioned key, there's no avoiding at least a portion of each sequence.

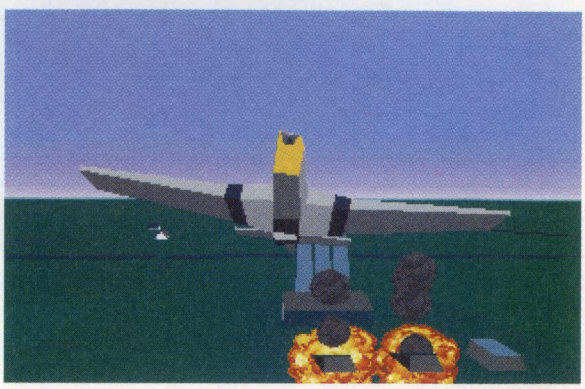
Once relievedly past the shell within which the actual flight simulation occurs, the second most appalling limitation of the design becomes immediately apparent: in **Heroes of the 357th**, the player is stuck with simulating a World War II pilot confined rigidly (with a neck brace, no doubt) to a forward view only. There are plenty of outside view choices available to check out the action, but these all immediately break the player out of the fiction of being seated within the plane; in the cockpit, it's eyes forward all the way.

To heap insult upon neck injury, the Auto Pilot option provides another prosthetic aid to the simulating pilot which serves to further mar the fiction of being in a real plane. Auto Pilot is an apparently ingenious means of getting the player's P-51 back quickly to the mission target once the latter's been lost sight of (very easy if you can't look around, eh?). It controls both steering and throttle, and invariably pushes the P-51 up to a cheerful, no-sweat 450 knots, even though without Auto Pilot it'll be a hot day in Helsinki before the player will ever get much past 350 (the P-51 is rated at a maximum speed of 437 knots).

Homage to catatonia

Then there are the enemy pilots themselves. They can be shot down using an endless supply of ammunition (no way of monitoring how many rounds are available or used), go up in a ball of flames with a single hit, maneuver like late World War II Nazi fighter fodder, put the bombers into catatonic shock when they engage (no return fire), and invariably head off into a steep, unfollowable dive as soon as they've done their dirty work.

Add to all this the fact that a campaign is simply a series of abstract (though historical) missions, the results of which are simply tallied up in a numerical score, and there's not much more to say about **Heroes of the 357th**. Someone was asleep at the wheel with this project. What a shame; the Boys deserve better.



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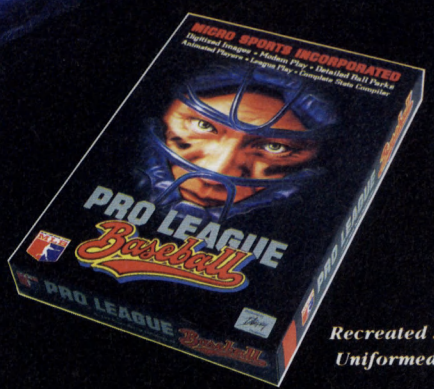

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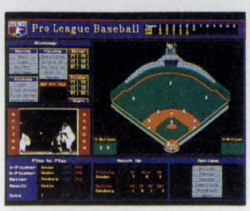

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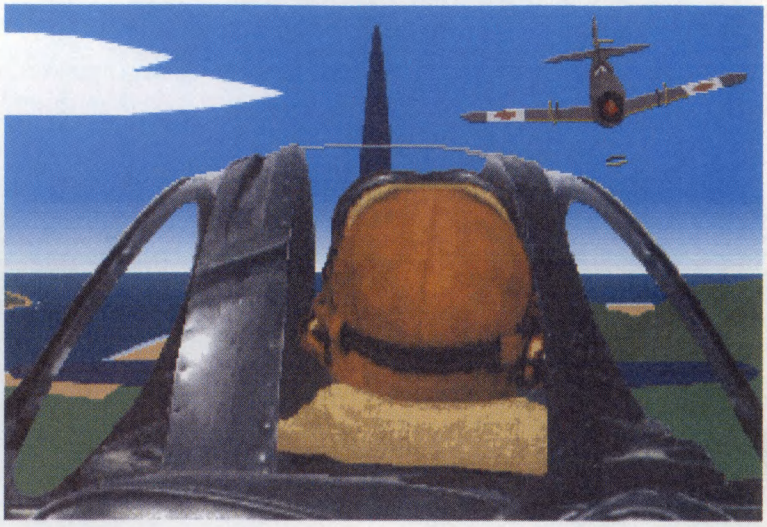
Reader Service No. 70

Diving in the Pacific



Dogfights have always been the strength of Dynamix air combat efforts, but **Aces of the Pacific** makes a concerted effort to incorporate a series of historical ground-attack (or rather, shipping strike) missions as well. While the boats may look like sitting ducks, the two options of either dive or torpedo bombing make bagging them ducks easier said than done.

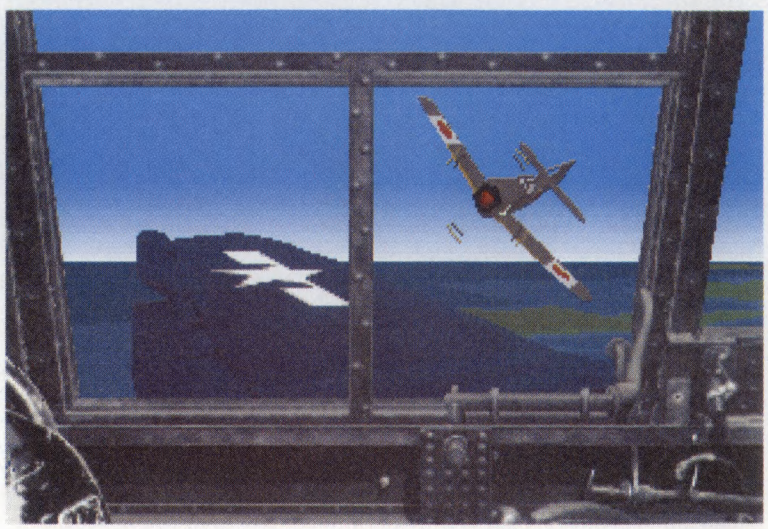
Dive bombing is a blast in **AOTP** (especially if there are no defending fighters); heading straight down from eighteen thousand feet to, say, eight hundred feet before letting fly definitely exercises the back muscles (live dangerously - there's nothing like the exhilaration of trying to pull out of a dive like that only hundreds of feet above the briny foam). For those less inclined to test the rocking strength of the rear legs on the chair they're sitting in, dive bombing can alternately be played as a precision dart contest from a couple of thousand feet up.

Torpedo bombing has to be the closest to software-simulated hell yet presented by any air combat simulation. More often than not, a torpedo bombing mission will involve dealing with vast crowds of eager yet hostile onlookers, from within a plane that, without wings, would probably be happier wallowing in the sea next to the ships it's approaching than attacking them. Certainly there is not going to be many climbing attacks on the fighters speeding past (a lucky quick nose up can sometimes produce results, though), and if the approach is being made sensibly, there's little room above the waves to do energy-wasting turns in an effort to avoid a rear approach.

Chip chat

Fortunately, there's a little friend in back, who gets quite chatty when things heat up; following his instructions to the letter is always a good idea, and checking on him when he grows quiet to see if he's taking an overly extensive but well-deserved rest is imperative. The rear gunner is an effective defense, as approaching one from a fighter in a different mission will make clear, especially if the plane is kept low enough that a fighter can't come in under the rear gunner's range of fire. I keep expecting him to turn around and ask, 'Hey Mac; got a light?' but so far no dice.

Speaking of talking with the computer, one of the nicest additions to the design of **AOTP** is all the in-flight conversation when opponents or targets are nearby. Of course, it's necessary to remember that this is the 1940's, and fifty percent of the time response to any radio messages sent is going to be, 'eh wot?' rather than 'Roger. Am attacking the fighters.' In other words, it's a good idea, especially if there are many novice pilots in the family, to re-send commands to the rest of the flight, or section if the computer-run wingmen don't seem to understand what's being asked of them.



Feedback howl

Once the computer wingies do finally get the message, however, it's lots of fun to watch what they end up doing on the mission replay recorder, after a mission has been completed. For instance, the player can park the view in the middle of the bombing target, and both see and hear the computer planes make their bombing runs, which more often than not will prove quite effective. Or, alternately, the computer planes can be viewed as they defend themselves against opponent fire, to gain useful tips from the program itself on the appropriate kinds of maneuvers to engage in with each particular plane (this is especially true with the low 'n slow variety). Only **Falcon 3.0** provides as much entertaining after-mission feedback in its replay feature.

Last bit of **AOTP** advice is, become a specialist in a particular plane flying Single Missions, and then move on to the next one, and then, after learning all the planes in a particular service, work through a campaign. The design lets the player go through the built-in missions in any order desired, but the above recommendation is likely to provide the most mileage. Over and out. ❑

Another Mark Baldwin Triumph!!

Can You Be? . . .

The Perfect General

The Ultimate Challenge of Strategy and Tactics!

QQP

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- The thrill and sounds of artillery, tanks and infantry in action.

"The Perfect General" computer game is IBM PC and Amiga compatible. It can be obtained through your favorite retailer or ordered direct by calling: 1-908-788-2799.

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Reader Service No. 39

Pro Audio Spectrum 16 Soundcard

Speechless

by Peter Syzmonik

One item missing from even the mightiest 486 PC is good sound. While Amiga, Atari ST, and Mac owners have long enjoyed great sound from their machines, DOS computer owners have been forced to deal with widely varying soundboard options and incompatibilities.

The big three

The big three soundcard manufacturers used to be Adlib, Creative Labs (SoundBlaster), and Roland (with the pricey LAPC-1.) Now there is a new kid on the block: Media Vision. Their Pro Audio Spectrum 16 (PAS-16) generated a lot of excitement even before the first beta unit went out the door. Media Vision promised to deliver a full 16-bit stereo soundcard with a host of new features while maintaining compatibility with the old 8-bit soundcard standard.

The PAS-16 board is very well designed and a marvel of surface-mount technology -- no klunky daughterboards or heavy soldering here. Installing the board is a piece of cake and should take less than five minutes. Pop the top off your PC and insert the board into any free slot (preferably a 16-bit slot for best performance.) A CD-ROM drive connector kit is available for around $35 direct from Media Vision. This feature of the PAS-16 alone makes it the soundcard of choice for CD-ROM owners because unlike SoundBlaster Pro's proprietary SCSI, the PAS-16's SCSI connector is industry standard and supports just about every CD-ROM drive on the market today.

First the good news

And now the bad news: installing the software drivers can be a real nightmare. The PAS-16 software driver installation program and board's manual are terrible. The original manual that shipped with the very first PAS-16 boards elicited screams of protest from users. It made little sense, was barely legible, and didn't offer any sort of tutorial or meaningful trouble-shooting section. A second release of the manual is now available free of charge and goes a long way towards correcting the problem. The software is another story.

The PAS-16 driver installation program should check the computer's DMA and IRQ settings and configure the drivers appropriately; it doesn't. Instead, if even the slightest conflict exists, the computer crashes without any hint or warning as to what went wrong. The answer lies in changing the DMA or IRQ settings manually using the portion of the driver software that will load.

But experience shows that any change in the settings, even to the correct settings, will cause the computer to lock-up. This leads to hours of fun changing the settings, rebooting the computer, seeing if the new settings worked, rebooting and starting the process all over again.

After spending a lot of time on this, I decided that this would be a good time to try out Media Vision's tech support. The tech support lines were not surprisingly busy. The few times I did manage to get through, I was greeted by a voice mail message asking me to leave a detailed message that would be answered 'ASAP.' But even at 8:00 AM, I couldn't leave any message because their voice mail system was already full!

Finally, after weeks of this nonsense, I got a call from Media Vision's tech support. To their credit, after half an hour I was up and running. The solution was for me to slow down my 386-20 system to non-turbo mode while the software drivers were being installed. Finally the drivers loaded correctly and I was in business. After three weeks and some 20+ hours of frustration, I had a working PAS-16 board.

The PAS-16 soundcard includes true 16-bit stereo digital audio playback & record, a 20-voice stereo synthesizer, a 4-watt per channel stereo amplifier, and a built-in SCSI interface that supports just about every CD ROM drive on the market. The board also comes with a pile of software including a MIDI sequencer, wave form editor, and text to speech synthesizer. The Board is retail priced at $299 and can be had via mail order for around $220-230.

The card to play

My recommendation? In spite of the problems I had installing the board, I recommend it for anyone looking for a versatile and great sounding soundcard. Most people I have talked to about the board also had experienced some problems, but once they worked the bugs out they didn't regret the effort.

Media Vision has hired a number of new tech support people and upped the number of 800 lines it offers. Network users have also been reporting that Media Vision is now returning their calls within 2-3 days. There is, however, competition coming down the line from Gravis and a new updated SoundBlaster Pro. But for now the PAS-16 card is the card to beat. ❑

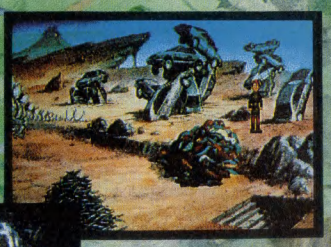
Manufactured by
Media Vision

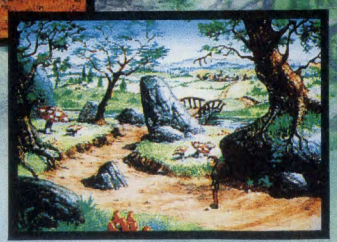
Systems
PC

Supports
CD ROM

Notes
Comes with a SCSI interface built in

curse of ENCHANTIA





Sucked into the cursed land of Enchantia, Brad finds himself chained and manacled inside a castle's dungeon. He escapes from the castle via a subterranean cave system and meets fortune tellers, magicians, dragons, elephant seals, fire demons plus many other coloured characters both friendly and otherwise!

Travel with Brad to the Valley of the Lost, the Ice Palace and the Graveyard in his quest to ensure his safe passage home.

Curse of Enchantia is available on Commodore Amiga (1 meg only) and IBM PC compatibles.

Screen shots from IBM PC version.

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SO, YOU'VE GOT A GAME...

Alan Smithie

tells you what to do with it

Accurate expectations may be the key to the whole process of getting a game published. Game designers need to think about what they expect before submitting anything. If riches are the dream, I advise a change of career. The chances of getting rich from game design may be better than winning the lottery, but the lottery is a much cheaper investment. Fame, even within the narrow confines of computer gaming, is similarly fleeting. I suggest that goals loftier than personal satisfaction and a decent living are quite possibly too high.

Note that these are personal goals. Designers should be sure that they have defined their expectations for their publisher as well. A short list should include: adequate compensation, retention of author's copyrights, a say in the development, distribution, packaging, and marketing of the product, and recognition within the game. A designer may not *require* all of the above, but they should think about them before making a submission. An unprepared designer may be so overwhelmed by any offer of acceptance that they are unable to make a sensible business decision about whether or not the offer makes sense. Setting expectations beforehand can prevent this from being a major problem.

Getting a head in business

Computer gaming is a business. A fun one, yes, but still a business. If the designer doesn't recognize this, be sure that the companies do. The lesson: make sure your submission will appeal to the publisher's business instincts. First and foremost, that means that the proposed game should appear to be profitable without fail. Most designers think that this means selling the game's potential popularity. This is the wrong approach. Business people are conservative. They are rarely willing to gamble on the alleged popularity of a new game by an untried designer. Or even an experienced one. Better by far to show how a game submission minimizes a publisher's risk (cost) while promising significant revenues (see the following paragraphs below for thoughts on how to do this.

Ideas are Cheap

I am going to digress for a moment and talk about fiction writing. There are few published authors who have not heard one or more acquaintances lament that they have a great idea for a novel, but don't have the time to write it. Some of these writer wannabes even have the chutzpah to suggest that their writing friends create the novel for them.

Ideas are cheap. Any writer worthy of the name has more ideas than time to turn them all into good stories. The situation for game designers and their companies is similar. Interesting new game ideas are plentiful. Many of them are good, some even outstanding. That isn't much though. Consider a typical game budget. Today, the larger companies spend at least a quarter of million dollars making a new game. Many games go over a million. The game idea, the original proposal, probably cost a few hundred dollars in creation and review time. The moral of all this is simple -- it is nearly impossible to sell an idea. And if one did sell it, the fetching price would likely be low.

Sell games, not concepts

The way around this is simple in concept, if not execution. A company won't bother with ideas, but they may look at complete games. A complete game is *not* a floppy disk and one page of instructions. A complete game should include the following: a complete working game, complete documentation on installation and setup (in English or a reasonable facsimile), complete documentation on game play, and hints on strategies or a walkthrough for adventure and role-playing games.

In addition, a self-running demo is a very good idea and is more likely to be seen than most of the game. Companies can't afford the time to play a game in its entirety, so a demo is a major asset. Particularly if it is slick and attention grabbing. Watch film trailers for an idea on how this works. Notice that few trailers try to tell the story of the film. They tease with fast images and a hot soundtrack. They tantalize, never explain. The game is the explanation, the payoff. Use the demo to get the company intrigued enough to take the game seriously.

Professionalism is key to all of this. The game must work as advertised. Ditto for the demo. The documentation must be accurate, proof-read, and nicely laid out. Diagrams are nice, but not required. What is required is a decent layout, laser printing (pay someone to do this if necessary), and reasonable typography. Some hints on the last: don't use Courier, don't use a dot-matrix printer, do use a standard serif font for body text (Times Roman may be plain, but it is readable). Appearances may only be skin deep, but companies will judge the submitter by what they can see and read. If the game bombs after the opening screen or the documentation looks like a grade D high school essay, the submission will be round-filed without regret.

Legal ease

I have touched on some legal considerations earlier, and some find such discussions boring. Take heed, though, this may be the most important advice in this article. Designers should know their rights and liabilities. Some companies ask that designers sign a release form assigning all rights to the product and characters contained therein to the publisher. Others treat submissions as their property once they are opened. Know a company's policies on submissions before sending anything (even a proposal).

Royalty arrangements differ from company to company. Some calculate based on a set figure per unit sold, some calculate on a floating cost adjusted for marketing, inventory, slow sales, or whatever. Some companies only count domestic sales, not international. Some count only the

sales on the initial platform. The variations are endless and the novice can easily be tripped up by them. Know also that some companies will offer advances on royalties. These sound attractive, and often are. However, these same companies will often offer a higher royalty rate if no advances are taken.

Be sure that a contract is created and agreed upon as early as possible. Having a boilerplate contract available to give to the company won't hurt, but chances are that the publisher's own legal staff will create the contract. Be sure to have a lawyer review each draft before proceeding. The contract should not only set royalty rates and assign rights. It should also clarify who bears the cost of package design and marketing. It should also specify how much will be spent on marketing the product and how it is to be tested, distributed and supported.

Customer support and maintenance of a game are particularly tricky issues. Most designers don't even contemplate these issues until shipping time. This is far too late. Maintenance of a shipping product rarely produces more income. Usually it simply takes time away from the next game. But many companies require the original creator to support the product if revisions are needed. Be sure the contract assigns compensation and a time limit for this task.

Technicalities

Now that I've frightened everyone with the legal morass of independent game design, it's time for a breather. Here are some thoughts on the technical side of game design. Know the market of the target platform. For example, games for the PC must sport VGA graphics to gain shelf space today. Don't bother submitting an EGA game. Similarly, mouse and sound card support are *de rigeur*. For the Macintosh, System 7 support and color support are requirements. The game should also run on older Systems (at least System 6.0.4) and run under MultiFinder. For the Amiga, ensure that the game runs properly on slower Amigas and under the new 2.04 ROMs, and that it is hard disk installable.

Also know that on every platform, audio and visual glitz are increasingly important. Not only must the game be fun, it must also be spectacular. At least in the introduction. Animation is in, text only games are out. I am not defending this trend, only pointing it out. If a game is to be accepted by a publisher and pushed aggressively by the publisher, it must fit into today's market.

The fun factor

Finally, despite all the warnings, have fun. If the above seems too burdensome, stick to shareware. If the designers aren't having fun, chances are the games they create won't be fun. Keep a cool head, play it smart, hand off legal problems to the lawyer, and sign with reputable companies. The designers may not get rich, but if they're having fun, then it was worth it. ❑

Hallo sailor!

I am a graduate of Coleman College here in San Diego with a degree in computer science. I am also a an avid wargamer and have been for over 15 years.

I am concerned about two reviews and I have to express my opinion. The reviews are of **Carrier Strike** (issue 20) by David Bolton and **Dreadnoughts** (issue 19) by Sandy Eisen. My concern is that though I agree with some of the criticisms put forth in their articles, I feel there may be not enough positive things said about the games, thereby hurting the industry. For example, in the **Dreadnoughts** review the author writes 'Another major failing of...'

I would like to know 1) how many hours were spent in actual playing time and the scenarios played, and 2) what are the reviewers credentials?

Tom Swenson
San Diego
CA 92129

I have been playing strategy games since 1961, and I have designed a soon-to-be-released WWI naval game. I would like to make several points about your recent reviews of **Dreadnoughts** and **Carrier Strike**. Having played both games extensively and analyzed them in depth, my sense is that neither reviewer played them very much. The depth of the evaluations seems to stop after a perusal of the interface. What are the credentials of the reviewers? How long did they play the game?

There were several inaccurate statements in the reviews and many of the complaints were about details not critical to the game's purpose of presenting a recreation of an actual historical situation. It would be more valuable if you were able to offer a list of these minor problems to the developer for a revision. As it is the developers who put so much energy into the games primarily for the love of the subject will probably feel frustrated and unappreciated. Hopefully they will not be discouraged from going on.

I would like to emphasize some of the points your reviewers failed to appreciate: **Dreadnoughts** is the world's first game to cover this subject, first to present 3-D ships, beautifully recreates command problems, has a reasonably challenging AI when compared to most games, excellent fog of war, etc.

Carrier Strike is the first historical game to graphically show weather, first to present carrier operations, etc. Constructive criticism benefits everyone. Improvements can and probably will be made to suggestions offered in a supportive way. Similarly, we need to avoid reviews which are just advertisements. Please print additional reviews of these two games that focus on the primary attributes of historical simulations: realism, historical accuracy, and a strong computer opponent.

Paul Shaffer
San Diego
CA 92109

I guess there must have been a stamp sale in San Diego this month. For your information, both David Bolton and Sandy Eisen are graduates from the University of Game Reviewers. David used to work for British Aerospace, but has recently been seen hanging around sailors bars.

The quote 'another major failing', applied only to the interface. Far from being a totally negative review, I would refer you to such comments as 'an excellent core for further development', 'can be strongly recommended to wargamers looking for a sound historic approach to the topic', 'will be played and enjoyed by those interested in the subject' - hardly the sort of stuff to have the designers reaching for the anti depressants.

Faith no more

When I first bought a PC, I said that's it, no more games, but I have to admit that I got hooked when I read your article on **Planet's Edge**. The game is fantastic and there's so much of it. However, there are some bugs so I feel your readers should know the following:

1) You have to press 'O' to orbit a prime planet and not just use Navigator.

2) Do not beam down to Acamar II, this will crash your system and you will have to reinstall the program. There are no clues there anyway.

I would like to know how to discover what is in the crates being transported to Kornephoros III before opening them. Can anyone help? I am willing to exchange information. Is New World planning to produce an upgrade for **Planet's Edge**? I have little faith in software companies any more.

Raymond Robidoux
Cornwall, Ontario,
Canada

Have there been games based on the *Alien* and *Star Wars* movies. Also, could you please help me with the following: In **X-Men: Madness in Murderworld**, how do you enter the trap door in the ceiling? In **Nightbreed** I need help getting through the maze section of midian. Finally, in **Secret of the Silver Blades**, how do you defeat the Dreadlord and his army in the Dreadlord's chamber of the castle?

Craig M Rhodes
New Wells, MO 63768

I regret that we cannot supply specific game hints. However, if any readers can supply answers to these questions we would be happy to publish them. Depending on response, we would be willing to start up a Q & A page so that readers may help one another.

*New World have no plans to produce an upgrade for **Planet's Edge**. There are no computer games that we know of based on the Star Wars movies, but check out **Dark Seed**, the artwork of which emanated from H R Geiger, the artist responsible for much of the set design in* Aliens.

We're back!

During our move to the US a number of readers letters got lost and we miss them terribly. But the good news is that we've opened an office in Liverpool so there's no excuse not to keep up the abuse.

Perhaps European Amiga owners are weary of complaining about the PC. If so, they should be rejuvenated by the article on page 36 which features a UNIX game and which dares to imply that this operating system might be better than Workbench 2.04! Well, what are you waiting for? Write to: Strategy Plus, Harley Buildings, 11 Old Hall St, Liverpool L3 9HT UK.

US readers should have nothing to complain about but nevertheless they can write to: Strategy Plus, 217 S Union St, Burlington, VT 05401.

Opponents wanted

Looking for modem opponents in the Illinois area for the following games: **Command HQ**, **Perfect General**, **Global Conquest**.

Tel Joel Seidal: 708 782 62667.

US readers write to:
Strategy Plus Inc
217 Union St
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Fax: 802 660 8864

European readers should write to:
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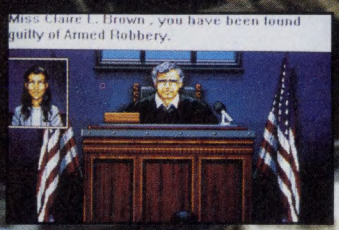
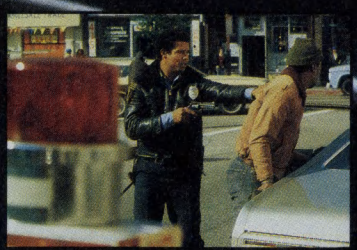
HILL STREET BLUES

THE COMPUTER GAME





HILL STREET BLUES is the most honored series in the history of television with the stunning accomplishment of 26 Emmy Awards and numerous other international awards.

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IBM VGA screens shown. Pictures of the actual TV series have been used with permission from MTM Production. Available for IBM PC/XT/AT, Tandy and 100% Compatibles with 512K and VGA/MCGA (256 colors), EGA (16 colors), Tandy (16 colors) or CGA. Supports Ad Lib and Soundblaster. Also available on AMIGA and ATARI ST. APPLE MACINTOSH version available soon. Visit your local dealer or call toll-free **1-800-783-8023**.

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Reader Service No. 80

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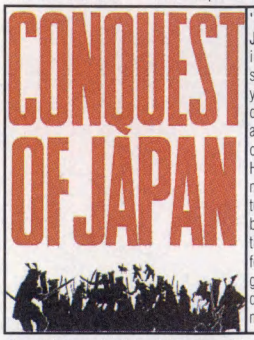
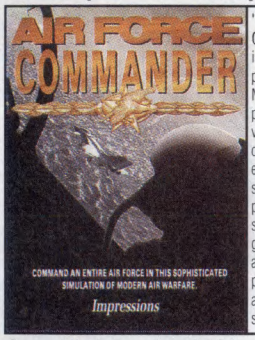


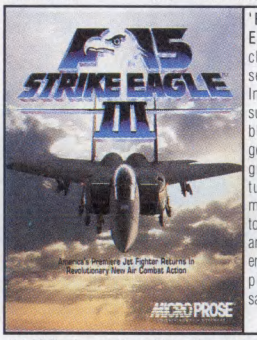
'CONQUEST OF JAPAN' is a miniature-style war simulation in which you start with 5 randomly placed cities and hire armies in order to conquer Honshu, Japan's main island. Features real time combat, colorful animation, authentic troop formations, strategic planning, and individual troop movement. **$34**

'TASK FORCE 1942' gives you a chance to command a fleet of destroyers, cruisers, and battleships against aggressive enemy forces in the South Pacific. Features night combat, realistic weather conditions, blinding explosions, flares, torpedoes, ability to send orders to ships & convoys, and VGA graphics. **$39**

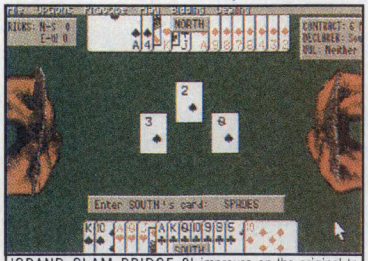
'AMAZON' recaptures the fun of the 1950's drive-in movies. Travel to unexplored regions of the Amazon, fight 10 foot ants, and find emeralds stolen by Cortez. Amazing cinematic effects such as multiple camera angles, flashbacks, zooms, pans, & fades. Features full digitized voices & sound effects. **$39**



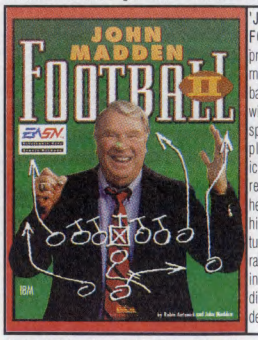
'AIR FORCE COMMANDER' is a game of air supremacy in the Middle East. Deploy squadrons at various bases, give combat missions to each squadron, and set up defensive patrols. Features satellite & geographic maps, an array of modern planes & missiles, and 28 Middle East scenarios. **$34**



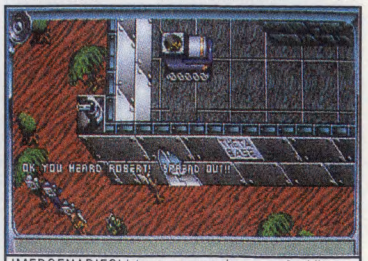
'F15 STRIKE EAGLE 3' will challenge even seasoned pilots. Includes a new visual system that blends 3D polygon and bitmapped graphics. Features campaign mode, 2 player head-to-head by modem, and 2 player cooperative in separate planes or in the same F15. **$44**



'GRAND SLAM BRIDGE 2' improves on the original to provide the most complete bridge program ever. Includes tutorial hands, practice mode and hints for new players. Supports mouse, VGA and all major sound cards. **$32**



'JOHN MADDEN FOOTBALL 2' improves on one of the most popular football games available with a new 3D perspective, play-by-play analysis, an icon menu, instant replay, and even help from Madden himself. Other features include player ratings, match-ups injuries, field conditions, & ability to design plays. **$32**



'MERCENARIES' lets you command a group of soldiers on interplanetary combat missions. Each mercenary, civilian, and alien has their own personality. Produce your own missions with the built in scenario editor. **$38**

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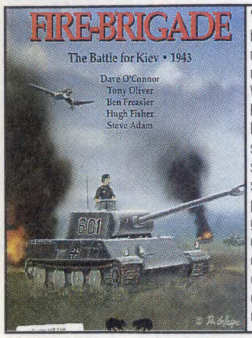
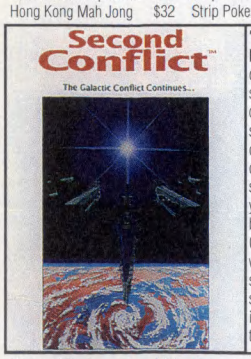
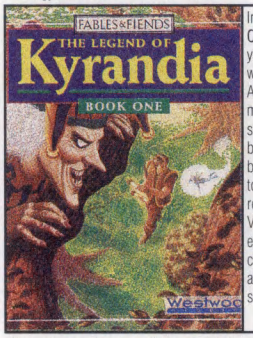


'FIRE BRIGADE' brings perhaps the most decisive and mobile battle of WWII, the Battle for Kiev 1943, to life. Features a range of scenarios variable skill levels, realistic staff support, comprehensive reports, german or soviet command, and computer or human opponent by modem or serial connection. **$34**

'FEMME FATALE' is a digital jigsaw puzzle for adults. The full screen VGA images may be scrambled into a varying number of pieces from 25 to 100. Numerous help features: save & reload multiple games, cancel & undo moves. IBM version includes 16 ravishing girls with optional data disks available. **$26**

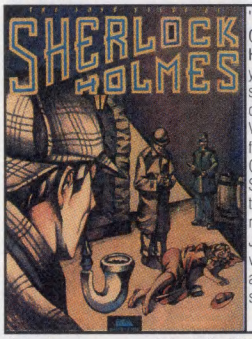


'SECOND CONFLICT' is a windows game of interstellar strategy and conquest. Test your skill against friends or the computer in one of 6 exciting scenarios or create your own with the built in editor. Choose between warships, stealthships, missiles, & transports in your quest to rule the galaxy. **$34**



In 'THE LEGEND OF KYRANDIA' you travel in a land where magic is real. A land of dark and mysterious forests, sleeping dragons, breath-taking beauty, and secrets to reveal. Features realistic animation, VGA graphics, elegant point and click interface, and an orchestrated soundtrack. **$35**

'DREADNOUGHTS' is a WWI surface fleet battle simulator. It recreates the look, specificatons, and tactics of fleet combat. Features 3D views, comprehensive manuals and sea charts, a potent English command parser, one or two player mode and computer controlled ships, gunnery and damage control. **$42**



'THE LOST FILES OF SHERLOCK HOLMES' allows you to explore and search over 50 richly detailed locations of Victorian London from the Thames to Covent Garden Square. Use your lab to analyze clues or review Watson's Journal for past conversations. Includes a classically scored soundtrack. **$44**

'EMPIRE DE-LUXE' is the update to the classic game of exploration and conquest. Expand your sphere of influence to span first a continent and then the world. Completely redone 256 color VGA graphics, digitized sound effects, and an intuitive player interface, network and modem play. **$39**

'SIEGE' is a medieval style castle assault game. You are given four castles to attack and defend in a one castle scenario or an extended campaign. Includes historical troops (French, English, Celtic), mythical troops (Elves, Trolls, Giants), siege towers, battering rams, catapults, and oil. **$38**

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Carrier Command	$12
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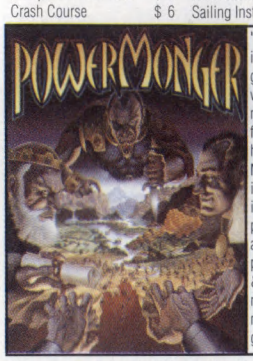

'POWERMONGER' is a unique strategy game. A living world with forests, mountains, towns, fisherman, weather, homes, jobs & NPCs with individual identities. Plan, produce, invent, and feed your people. 3D zoom & rotate, play by modem, random maps & great graphics. **$34**

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Falcon 3.0	$45
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Flight Planner	$24
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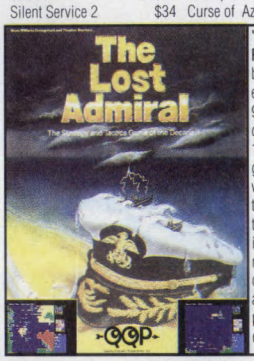

'LOST ADMIRAL' is a turn based naval strategy game. Features 9 scenarios, a random map scenario, 15 campaign games, flagships with special abilities, very strong artificial intelligence, in depth officers ranking system, a career history that accumulates as you play, and a 2 player option. **$24**

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Test Drive 2: Supercars	$15
Test Drive 3	$29
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'RAGNAROK' lets you experience the vast, unbounded world of Norse Mythology. Acquire the arcane skills of polymorph and transformation in order to defeat Surtr and his hordes of Demons. Includes 100 action-packed realms, over 200 magical artifacts, 200 distinct races, & VGA graphics. **$38**

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'DUSK OF THE GODS' is a role-playing game that lets you enter Valhalla. Become one of Odin's champions; explore Asgard, Midgard, & Jotenheim, seek out knowledge and attempt to tip the scales in favor of Odin. Features include 256 color VGA, sound board support & point click interface. **$29**

M1 Tank Platoon	$34
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Rapcon	$29
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'ARMADA 2525' is a battle between galactic empires. Amass your forces to wage war over control of the most hospitable planets in the unforgiving void of space. You must balance military spending with industrial growth, & decide whether to defend your own planets or launch an attack on enemy fleets. **$29**

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Space Ace 2 Color	$34
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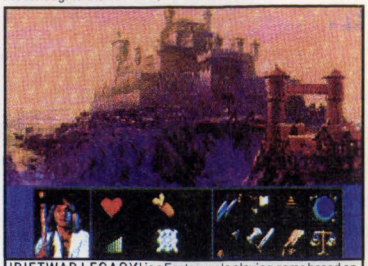

'RIFTWAR LEGACY' is a Fantasy role playing game based on the Riftwar novels. Features smooth, realistic animation, advanced combat intelligence, multiple paths with different conclusions, and hundreds of objects and spells. **$39**

Fire Brigade	$35
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Test Drive 2: Muscle Car	$15
Test Drive 2: Supercars	$15
Tracon	$34
Tracon 2	$29
Vette	$33
Yeager's AFT	$32

MAC EDUCATIONAL

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Omega	$34
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'FRONT PAGE SPORTS FOOTBALL' brings simulation technology to the sports arena. Play quarterback, coach or general manager. Features a Play Editor, replay from 9 different angles, draft rookies, and trade players. **$39**

'PRO AUDIO SPECTRUM 16' features 16 bit sampling at 4-44kHz, Yamaha voice stereo synthesizer, 16 bit DAC, 4 operator FM sounds, 4 watts per channel, & an impedance that will drive 4 or 8 ohm speakers. Comes with built in SCSI, MIDI sequencer, waveform editor, and 4 track music studio software. **$229**

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'CARRIERS AT WAR' brings to life six crucial carrier battles of WWII: Pearl Harbor, Coral Sea, Midway, Eastern Shores, Santa Cruz, and Great Marianas Turkey Shoot. Seek out and destroy enemy carriers, fleets, and air forces. Features hundreds of individually modeled ships & aircraft from that period. **$39**

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KGB $19
Khalaan $34
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King's Quest 2 $15
King's Quest 3 $15
King's Quest 4 $34
King's Quest 5 $34
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Legend of Faerghail $28
Legend of Kyrandia $35
Leisure Suit Larry 1 Enh $34
Leisure Suit Larry 1 $24
Leisure Suit Larry 2 $15
Leisure Suit Larry 3 $24
Leisure Suit Larry 5 $39
License to Kill $28
Lord of the Rings Vol 2 $36
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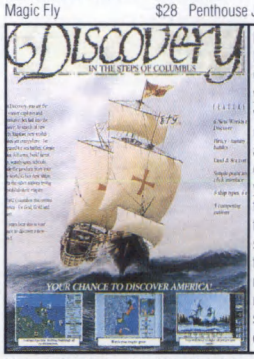
Magic Fly $28



In **'DISCOVERY IN THE STEPS OF COLUMBUS'** you explore new worlds, battle pirates, create cities and trade with other countries to further your empire. Features 6 new worlds to discover, land & sea combat, 8 ship types, 4 different maps, 5 competing nations, and a simple point and click interface. **$34**

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Manhunter SF $29
Mean Streets $31
Moebius $41
Munsters $27
Oil's Well $21
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Space Quest 3 $34
Space Quest 4 $34
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Street Rod 2 $27
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Warriors of Legend $19
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Omar Sharif on Bridge $32
Peanuts $31
Penthouse Jigsaw $24
Pinball Dreams $32
Pool Shark $15
Risk $24
Scrabble $24
Shanghaii 2 $32
Solitarie's Journey $36
Solitaire Royale $24
Spot $15
Stratego $32
Strip Poker 3 $29
Swap $29
Tetris $24
Trump Castle 2 $32

'SPACEWARD HO!' takes you to the stars as you explore and conquer the galaxy. You allocate funds & resources to build armadas, inhabit & terraform planets, research new technologies. Features an adjustable galaxy size, number of players up to 19, network and modem play. **$38**

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Ski or Die $32
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Wayne Gretzky Hockey 2 $34
Wayne Gretzky League $28
World Circuit $34
World Class Leaderboard $26
World Class LB Course 1 $15
World Class LB Course 2 $15
World Class LB Course 3 $15
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Bard's Tale 3 $32
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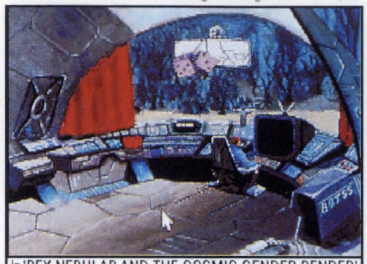
Bloodwych Data Disk $21
Captive $30
Carthage $29
Celtic Legends $32
Champions of Krynn $32
Chaos in Andromeda $27
Chronoquest 2 $34



In **'REX NEBULAR AND THE COSMIC GENDER BENDER'** you are an interstellar explorer who embarks on a romping space adventure. Journey underwater & underground as you unravel the many puzzles of Terra Androgena. VGA & sound support. **$39**

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Keys to Maramon $32
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Prophecy of the Shadow $38
Rings of Medusa $34
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Space Inc $34
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Spirit of Excalibur $19
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Knight Force $31
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Light Quest $32
Loopz $34
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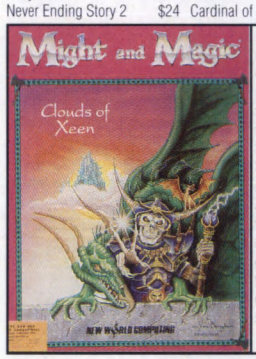
Matrix Marauders $28
Menace $34
Monty Python $15
Mystical $27
Navy Seals $27
Never Ending Story 2 $24



In **'MIGHT AND MAGIC: CLOUDS OF XEEN'** you must lead a band of adventurers to bring down the evil Lord Xeen. Features full 256 color VGA support, full screen animation, animated icons to warn of danger, automapping, point & click interface, digitized speech, sound effects, & musical score. **$46**

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Shadow Beast 3 $27
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Warzone $27
Wild Streets $31
Wild Wheels $32
Xenophobe $25
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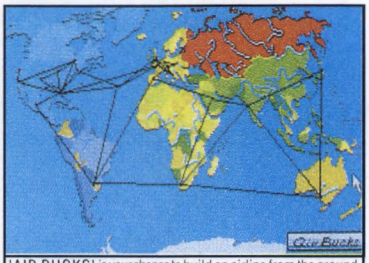

'AIR BUCKS' is your chance to build an airline from the ground up. Starting with $100,000 and a DC3, you must decide which routes to cover, where to locate your hub, which planes to buy. Changing world map, 1 to 4 players, and a point &click interface. **$34**

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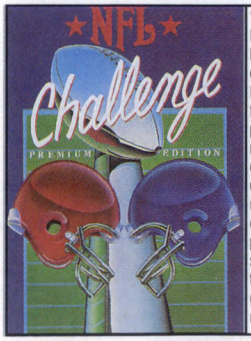

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